FIRE MANAGEMENT PLAN

FOR

UPPER MISSISSIPPI RIVER

NATIONAL WILDLIFE REFUGE AND FISH REFUGE

Winona, Minnesota

Prepared by: _____ _____
Date

Submitted by: _____ _____
Project Leader Date

Reviewed by: _____ _____
Zone FMO Date

Concurred by: _____ _____
Regional Fire Management Coordinator Date
Great Lakes and Big Rivers Region

Concurred by: _____ _____
Chief, National Wildlife Refuge System Date
Great Lakes & Big Rivers Region

Approved by: _____ _____
Regional Director Date

Note to Reader

Fire Management Plan
Upper Mississippi River National Wildlife and Fish Refuge
April 13, 2005

This Fire Management Plan is available for review on the US Fish and Wildlife Service, Region 3 planning web page at:
http://www.fws.gov/midwest/planning/uppermiss/index.html

The Web page version of the plan does not include several pages and appendices of the printed document. Those pages and appendices, listed below, are available upon request at the Refuge headquarters:
Fire Plan
Upper Mississippi River NW&FR
51 East 4th Street, Room 101
Winona, MN 55987
Telephone: 507/452-4232

Pages not available on Web:

Page 28, Figure showing "Fire Season Occurrence for the United States", USDA Forest Service.
Appendix A: Cooperative Agreement Between the Dept. of the Army and Department of the Interior.
Appendix B. List of Wildlife Species
Appendix C. Public Law No. 268, 68th Congress. Establishing the Upper Mississippi River Wild Life and Fish Refuge.
Appendix D. Critique of Burn
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Appendix J. Fire Behavior Fuel Model 3
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INTRODUCTION

Purpose

This Fire Management Plan (FMP) for Upper Mississippi River National Wildlife and Fish Refuge (Refuge) replaces the current plan that was approved in 1987. This revised plan is necessary due to recent Refuge land additions, and changes in national policy, planning and training requirement with regard to fire management.

This plan establishes operational procedures that guide all aspects of Refuge fire management, including wildfire response and preparedness, and conforms to all Fish and Wildlife Service (Service) requirements. The FMP is a tool used to assist managers in meeting the Refuge's resource goals and objectives.

DESCRIPTION OF UPPER MISSISSIPPI RIVER NWFR

Management Overview

Because the Refuge is so large, approximately 230,000 acres, and spread over 261 miles it is separated into four management Districts with an office and staff for each. The Districts are Winona (Minnesota), La Crosse (Wisconsin), McGregor (Iowa) and Savanna (Illinois). **Figure 1** shows the area that each District has management responsibilities over and a general view of the size of the Refuge. This plan will include an overview of the entire Refuge appropriate to all Districts. However, each District will have separate information regarding actions related to fire management for both suppression and prescribed fire that they have responsibilities over.

Another important management distinction is the fact that the Refuge is made up of Service fee title lands and Corps of Engineer (COE) lands, which are managed through a Cooperative Agreement (**APPENDIX A**). For the purpose of this FMP, both Service and COE lands managed under the Cooperative Agreement are considered as part of the Refuge.

Physiography

The Refuge is located in what was once the bottom of an inland sea, evidenced by the flat tops of bluffs on both sides of the river and limestone deposits. Much of the Refuge is in a "driftless" area, where the last ice sheet did not cover the land.

As this ice sheet melted and receded, it formed glacial Lake Agassiz in northwestern Minnesota and south central Manitoba. Heavy flows from the melting ice flowed through the Minnesota River into the Mississippi River and carved out the gorge which is now the Mississippi Valley. The Refuge is bordered by bluffs varying from 650 to 200 feet higher than the valley floor from the Chippewa River, WI to Clinton, IA. Below Clinton, the bluffs give way to more gradual slopes. As the Minnesota and Iowa bluffs are primarily north or east facing, snow does not melt off during winter months, and because of the increased moisture, they are generally heavily timbered. By contrast, the Wisconsin bluffs are primarily south or west facing, causing drier conditions, which support less timber and result in grassier slopes, known as goat prairies.

The Mississippi River was a free-flowing river until the navigation dams were constructed in the 1930's. The Upper Mississippi River now is divided into a series of step-like pools created by the Locks & Dams that allows for river navigation throughout the ice-free season. As the Refuge runs approximately 261 miles from the mouth of the Chippewa River in Wisconsin to Lock and Dam Number 14 near Davenport, Iowa, it is influenced by the pool manipulations of 12 Locks and Dams (4-14).

Each Pool can basically be divided into three major zones (Figure 2). The upper portions of each pool, just below the dam, still retain much of the original river character and are heavily timbered with many meandering side channels. The central portion of each pool tends to support extensive marsh areas and backwater lakes due to the impounded water, which covers historic islands and old hay meadows. The best marsh development occurs in this zone. The lower portions, directly above the dams resemble reservoirs with limited aquatic plant growth.

These impoundments have abruptly changed the river bottoms from having the normal wide fluctuations in water elevations, ranging from floods in the spring to drying out during the summer. Water levels are now more stabilized where flooding still occurs in the spring and during high water events but during the summer, even in extreme drought conditions, the river bottoms do not dry out as in historic times.

Refuge lands are generally confined to the river flood plain and lie between railroads bordering the river although there are a number of tracts that are on the other side of the tracks. Refuge boundaries are shown in Figures 4-21. Bottomland varies from two to five miles in width between the mouth of the Chippewa River at the upper end of the Refuge, and at the mouth of the

Wisconsin River near Prairie du Chien. Below Prairie du Chien bottomlands become narrower. Below Clinton, Iowa, from Beaver Island to the southern extremity of the Refuge, bottomlands are negligible except at mouths of tributary streams.

Soils

Glacial till is the major component of the river valley soils. Soils vary from well leached soils with a shallow organic layer, typical of moist forest soil, to poorly leached soils with deep organic layer, typical of prairie soils. Soils are sandy clay loams on till, to loamy sand. A few small areas of clayey soils are found within the Refuge. Well drained sites and northern exposures have lighter soils with less organic material. One geologic study done by Winona State University, in the Winona, Minnesota area, shows that the present river now sits on top of a layer of gravel, sand and silt that is 200'+ thick. For the most part this is probably the case throughout the Refuge. This deposit of sediment occurred after the Glacial River Warren episode, which had scoured the valley. After this episode, water flowed more slowly allowing the sediment to be deposited rather than washed down stream.

Coincident with forming the river valley was the deposit of windblown soils. This resulted in deep loess (wind-blown silt) deposits and sand prairies, scattered throughout the length of the Refuge. Some of these sand prairies (e. g., Thomson Prairie Research Natural Area) exhibit “blow-outs” normally associated with the western sandhills. On these scattered sand areas, forms of plant and animal life usually found much further west have persisted.

Vegetation

The Refuge has a great deal of ecological diversity due to its location in a sheltered river floodplain, its north-south expanse and being in the transition between the eastern hardwood forests and western prairie. At present there are 540 identified vegetative species known on the Refuge. The natural vegetation of the river valley consists of bottomland deciduous forest, marsh and aquatic plants, and on a few scattered sand terraces, prairie-type species. The majority of the vegetative communities is wetlands, both forested and herbaceous.

At the time of earliest white settlement the river valley forest type for the most part was Elm-Ash-Cottonwood (Atlas of Minnesota Resources and Settlement). The most common forest species today include silver maple, willow, cottonwood, green ash, box elder, hackberry and river birch in the forested wetlands with walnut and swamp white oak on higher sites. Scattered hardwoods stands do occur including basswood and the most northerly known stand of pecan trees. Thirty years ago American elm still made up a large component of the timber type but has since disappeared due to Dutch elm disease.

Understory vegetation in the forest types is primarily nettles with poison ivy and/or other thick herbaceous growth. Litter is negligible due to the annual spring flooding.

Emergent vegetation in the marshes includes locally dominant species such as river bulrush, round stemmed bulrushes, cattail, Phragmites, arrowhead, and smartweeds. Wild rice occurs intermittently in upper parts of the river but is absent south of Pool 10. The most common aquatics are pondweeds, coontail, elodea, wild celery and American lotus. Floating vegetation includes the duckweeds, abundant in most quiet water areas.

Some meadows and sand prairies are present in various locations. The drier meadows are vegetated by blue grass and big and little bluestem. Forms such as yucca and gramma, adapted to dry sandy soil, dominate the arid sand prairies. On the marsh borders, dikes, and damp meadows, cord grass, reed canary grass, rice cutgrass and sedges appear.

In many places it is possible to locate the Refuge boundary by noting where the natural vegetation stops and development begins. It is apparent that the Refuge has preserved in a more natural state a large portion of the river floodplain.

Climate

The climate varies a great deal over the Refuge's north-south extent. The entire area is subject to hot, humid summers, and cold winters. Extremes can be found at both ends and it is not uncommon for many portions of the river to freeze over completely, especially in the north. On average, the annual daily mean temperature is 5 degrees colder at the northern most end of the Refuge as compared to the southern most end. Average precipitation is about 30 inches in

the north to around 35 inches in the south. About 80% falls as rain between the months of April through October with the rest mostly as snow in the north with a mix at the extreme southern end of the Refuge. Because the Refuge is located in the Mississippi River basin there is generally a spring run off period when the river rises above normal levels for the month of April and can last into June. Another interesting point is that because the Refuge is only 550 feet above sea level and is flanked by bluffs as high as 650 feet above the valley floor, green up is generally a few days to a week ahead of the surrounding uplands due to warmer temperatures in the spring.

Values to Protect

The Refuge is basically a hot bed of cultural resources. The sites known are listed below for each District. At the present time no site is within a prescribed burn unit. These sites will continue to be taken in to account when planning prescribed burns and also when attacking wildfires.

Historical and Archeological Site Locations by District

Winona

Trout Creek Cave- near the intersection of Trout Creek and Highway 61.
Denzer Meadow Site-exact location unknown.
Nelson Sewage Plant Site-exact location unknown.
Rieck's Lake Site-Corps Land

La Crosse

Pool 7, T16N, R7W, Sec. 6.
Pool 8, T16N, R7W, SE1/4NW1/4 Sec. 31.
Pool 8, T15N, R7W, SW 1/4 Sec. 22.
Pool 8, T15N, R7W, NW1/4NW1/4SW1/4 Sec. 22.
Pool 8, T15N, R7W, SE 1/4 Sec. 32.
Pool 8, T14N, R7W, N1/2NW1/4NE1/4, Sec. 5.
Pool 8, T14N, R7W, S1/2NW1/4NE1/4, Sec. 5.
Pool 8, T13N, R7W, SE1/4SE1/4SW1/4, Sec. 9.
Pool 8, T14N, R7W, NW1/4NW1/4, Sec. 33.
Pool 8, T13N, R7W, NW1/4SW1/4, Sec. 16.

McGregor District

Pool 9 T10N, R4W, SW1/4SE1/4, Sec. 35.
Pool 9 T10N, R4W, NE1/4SW1/4NW1/4, Sec. 36.
Alfred Reed Mound Group
Site SPT-16 T2N, R3W, SE1/4SE1/4, Sec. 10.
Site GT-153 T2N, R3W, SE1/4SE1/4, Sec. 10.

Savanna District

Site 1 River Mile (RM) 576.7 T29N, R2W, Sec. 33.
Site 2 RM 576, T28N, R2W Sec. 4.
Site 3 RM 575.8 T28N, R3E, Sec. 4.
Site 4 Rm 575.6 T28N, R3E, Sec. 4.
Site 5 RM 575.5 T28N, R3E, Sec. 3.
Site 6 RM 575.5 T28N, R3E, Sec. 3.
Site 7 RM 575.4 T28N, R3E, Sec. 3.
Site 8 RM 575.4 T28N, R3E, Sec. 3.
Site 9 RM 572.6 T28N, R2E, Sec. 12.
Site 10 RM 572.2 T28N, R3E, Sec. 13.
Site 11 RM 571.4 T28N, R3E, Sec. 13.
Site 12 RM 570.9 T28N, R4E, Sec. 19.
Site 13 RM 569.0 T28N, R4E, Sec. 20.
Site 14 RM 535.0 T24N, R3E, Sec. 15.
Site 15 RM 525.0 T23N, R3E, Sec. 35.

The Refuge has five Research Natural Areas including: Nelson-Trevino, 3,740 acres, located in Pool 4; Midway Railroad Prairie SNA, 5 acres, located in Pool 7; Reno Bottoms, 1,980 acres, located in Pool 9; Twelve Mile Island, 600 acres, located in Pool 11; and Thomson Sand Prairie, 500 acres, located in Pool 13. In addition there is the Chippewa Bottoms National Landmark which is part of the Nelson-Trevino Research Natural Area.

There are limited structures and facilities that would be negatively impacted by a fire. The most important would be the two District Offices (McGregor & Savanna) which are built on Service lands. There are also buildings that house equipment scattered amongst the Districts. In addition there are public use facilities located throughout the Refuge.

Socioeconomic Features

The Refuge's affected environment with respect to human populations extends 261 river miles and has an influence on the following cities (1990 populations) along the River:

Minnesota

Wabasha	2,384
Winona	25,399
LaCrescent	4,311

Wisconsin

Alma	790
Fountain City	938
Trempealeau	946
Onalaska	11,284
La Crosse	51,003
Stoddard	775
Prairie du Chien	5,656
Cassville	1,144

Iowa

Lansing	1,007
McGregor	797
Bellevue	2,239
Dubuque	57,546
Clinton	29,201
Davenport	95,333
Bettendorf	28,132

Illinois

East Dubuque	1,914
Galena	3,647
Savanna	3,819
Moline	43,202
Rock Island	40,552

The above towns only represent those that have populations of 750 or larger. There are many other smaller towns that border the Refuge.

The Refuge has a major economic impact on its surrounding cities and towns. A total of 3.5 million visitors a year come to the river for recreational purposes with the Refuge, through it's facilities and/or management, catering to many of their

needs. The river provides numerous jobs directly related to the river and Refuge including; transportation, recreation (fish floats, marinas, boat rentals, etc), and commercial fishing & clamming. Indirect jobs include: motels & cabin rental; restaurants and bars; boat sales, fishing tackle, bait etc. It can be stated that there is a multi-billion dollar industry (1.2 billion for recreation alone) that in some way is supported by the presence of the river and Refuge.

The Refuge due to its linear nature and length has hundreds of miles of boundary. For many of those miles the boundary is the railroad grades on both sides of the river. However, Refuge land is also bounded by private owners in a rural and/or urban setting.

Wildlife

Upper Mississippi River NWFR supports numerous species of birds, mammals, reptiles and amphibians (see **APPENDIX B**) for the lists of species identified on the Refuge.

The special attention species fall into the categories listed below. The main categories are in priority order, but the subcategories are parallel to each other.

1.) Species Identified by the Fish and Wildlife Service as Trust Responsibility
   a.) Migratory bird, especially waterfowl and nontropical migrants.
   b.) Candidate, threatened or endangered species under the auspices of the Endangered Species Act of 1973, as amended.

2.) Species Identified Nationally or Regionally by the Fish and Wildlife Service as Species of Special Concern.
   a.) Region 3 Fish and Wildlife Resource Conservation Priorities (U.S. Fish and Wildlife Service, 1998a).

3.) Species Listed as Endangered, Threatened, Candidate, or Special Concern Species pursuant to the Wisconsin, Minnesota, Iowa and/or Illinois Endangered Species Acts.

It is found that at this time the Refuge Fire Management program does not adversely impact any species that are identified as falling into one of the above categories as they do not occur nor is their critical habitat located in any proposed

prescribed burn listed in this plan. In planning the annual prescribed burning

program a biological review of species present on each burn unit will still be completed and signed off on by the District Manager and Project Leader. This review will include any possible impacts of fire on any listed species if present. **APPENDIX B** includes a specific list of species of special concern. If warranted an "Intra-Service Section 7 Biological Evaluation Form" will be completed for the specific prescribed burn unit.

Historic Role of Fire

There is no recorded history of fire on the Refuge prior to its establishment in 1924. Our best guess is that fire played a minor role within the river valley. That's not to say wildfires did not occur on lands now managed as part of the Refuge, as the river was certainly heavily used by Native Americans and fire surely occurred in the historic meadows and grasslands that were once part of the original river valley. However, since the placement of the Locks and Dams the areas that would have been influenced by fire are now mostly under water. The lowland forests which are still present would have been rarely burned. This is documented as in pre-settlement times they were composed of elm, ash and cottonwood, species which are not dependant on fire to survive. The exception to this is the scattered surviving prairie areas that are above flood level which have species that are fire dependant.

Fire Ecology - Fire's Effect on Vegetation/Wildlife/Soils

As wildfires have been limited in scope on the Refuge there is little documentation as to their impact on the areas burned with regard to the vegetation, wildlife and/or soils.

Prescribed fire has been mostly confined to the prairie areas of the Refuge for the purpose of restoring and/or maintaining the diverse native plant community. This is very important for the Winona and Savanna Districts as there are still areas which have remnant native prairie vegetation. To date fire has been used successfully to maintain the native plant species on these areas.

Fire has had no negative impact on Threatened and/or Endangered species on the Refuge.

Fire History

Since 1989 records show that there have been a total of 29 reported wildfires on the Refuge. **Figures 1 & 2** records the number of wildfires and number of acres burned by year, respectively, for the period 1989-2000. In summary, of 29 wildfires, 23 where 10 acres or less in size and of these 14 burned 1 acre or less. This is summarized in **Figure 3**.

Figure 1. Number of Wildfires at Upper Mississippi River National Wildlife and Fish Refuge 1989-2000

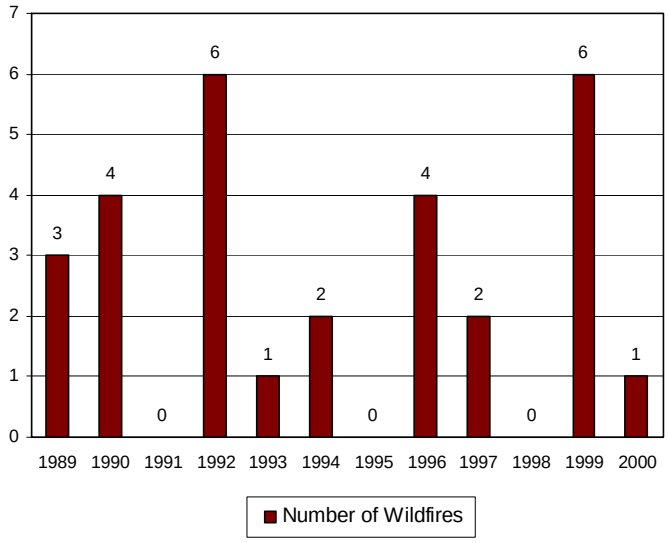


Figure 2. Acres Burned by Wildfires at Upper Mississippi River National Wildlife and Fish Refuge 1989-2000

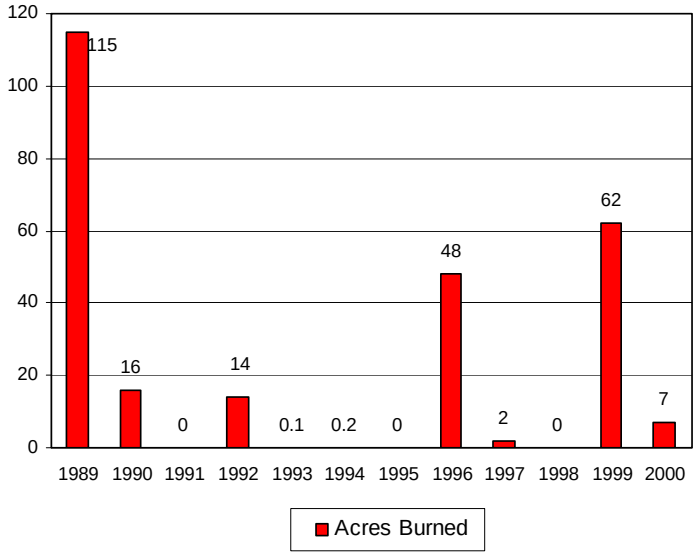
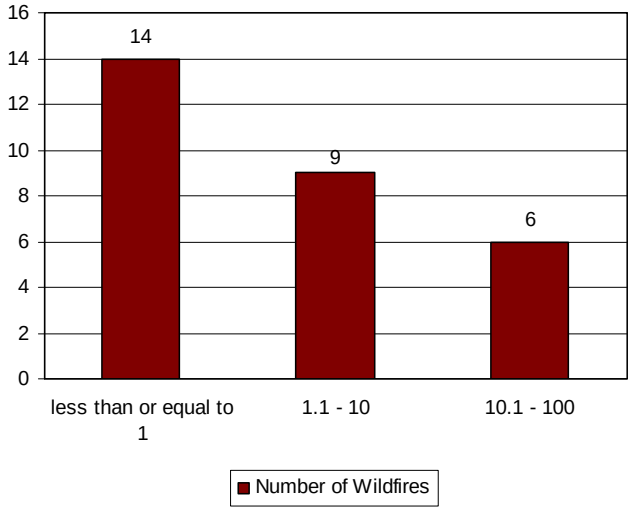


Figure 3. Number of Wildfires by Acreage Class at Upper Mississippi River National Wildlife and Fish Refuge 1989-2000



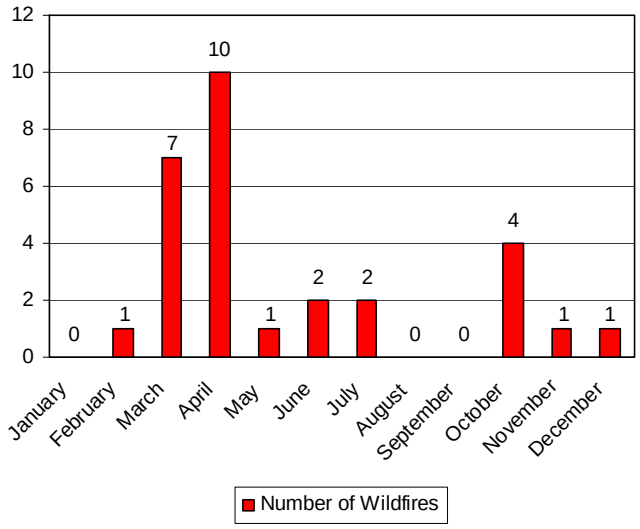
Of the total, 18 wildfires occurred in the March-May period and 4 in October. The remaining fires were scattered throughout the rest of the year with only January, August and September wildfire free. This is summarized in **Figure 4**.

The District wildfire occurrence and acreage burned over this period (1989-2000) is as follows:

Winona District	2 fires	1.1 acres
La Crosse District	13 fires	113.9 acres
McGregor District	7 fires	138.5 acres
Savanna District	7 fires	19.4 acres

The main causes of wildfires was arson or escaped campfires. It should be noted that arson fires have accounted for all fires over 10 acres in size except for one escaped campfire which burned 60 acres.

Figure 4. Number of Wildfires by Month at Upper Mississippi River National Wildlife and Fish Refuge 1989-2000



In looking at the past fire data most wildfires are contained almost immediately upon attack. However, one can also see that there are periods when a fire can burn substantial acreage if conditions are right.

Prescribed burning history is displayed in **Figures 5 & 6** including number of areas burned and number of acres burned by year, respectively for the period 1991-2000. In total 80 prescribed burns were completed burning 1592 acres over this period. By District the figures breakdown as follows:

Winona District 19 burns 170 acres

La Crosse District 10 burns 103 acres

McGregor District 10 burns 295 acres (1996-2000)

Savanna District 41 burns 1100 acres

The Savanna District has the most active burning program due to the abundance of native prairie and grasslands.

Figure 5. Number of Prescribed Burns at Upper Mississippi River National Wildlife and Fish Refuge 1991-2000

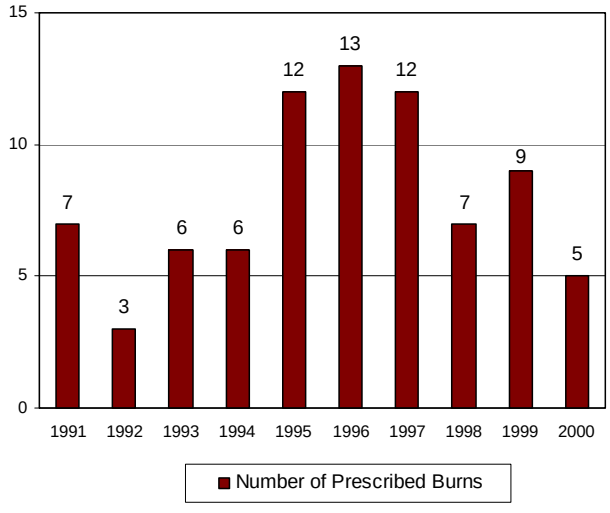
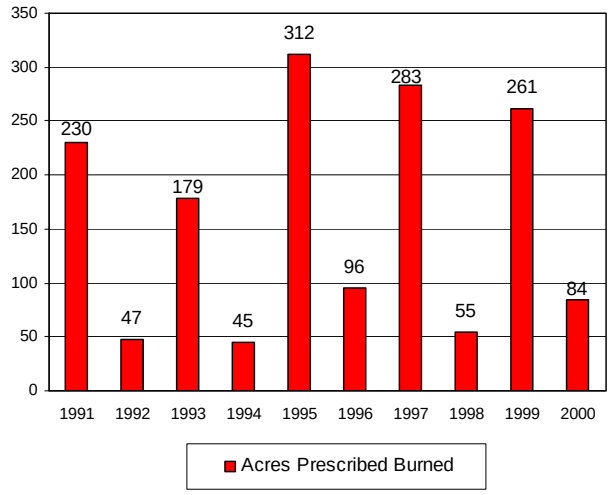


Figure 6. Acres Prescribed Burned at Upper Mississippi River National Wildlife and Fish Refuge 1991-2000



POLICY COMPLIANCE

Compliance and Authorities

Service Manual direction (621 FW 2.3A) states, "A fire management plan is prepared for each Refuge that conducts prescribed fires or on which wildfires may occur". Department policy also states that Refuge lands with vegetation capable of sustaining fire will develop a fire management plan (910 DM 1.4B).

The Upper Mississippi River National Wildlife and Fish Refuge's FMP is a detailed plan of action to implement fire management policies and goals, relating to both wildfire and prescribed fire management. Whether wildfire suppression or management ignited fire for the benefit of habitat and wildlife, the protection of life, health, and property are of highest priority.

This plan is governed by several related statutory authorities. They include the Clean Air Act, the Clean Water Act, the Endangered Species Act, the National

Environmental Policy Act and the Antiquities Act. Department Manual 910 (1.1) and Fish and Wildlife Service Manual, part 621, section 1.4, contain other statute citations authorizing and providing the means for prevention, presuppression, and suppression of wildfire on or threatening lands under the jurisdiction of the National Wildlife Refuge System.

NEPA Compliance

This plan meets the requirements of the National Environmental Protection Act (NEPA). A categorical exclusion applies to this plan as it incorporates only minor management changes from the approved 1987 Fire Management Plan. As noted previously an "Intra-Service Section 7 Biological Evaluation Form" will be completed, if necessary, for a specific prescribed burn unit before it is approved.

Upper Mississippi River National Wildlife and Fish Refuge Executive Order

Passage of the 1924 Upper Mississippi River Wild Life and Fish Refuge Act **(APPENDIX C**) resulted in the refuge's creation. The purpose of the refuge, funding authorizations, and the powers and duties delegated for operation of the refuge are contained within the Act. The refuge was established in part to meet the obligations accepted by the United States through the Migratory Bird Treaties - obligations delegated to federal agencies by the Migratory Bird Treaty Act. It was also established "as a breeding place for other wild birds, game animals, fur-bearing animals, and for the conservation of wild flowers and aquatic plants and . . . as a breeding place for fish and other aquatic animal life".

The 1934 Fish and Wildlife Coordination Act and subsequent amendments to the Act provide the authority for the Service to enter into a cooperative agreement with the COE for the transfer of lands suitable for migratory bird programs into the refuge, and to develop general plans with the COE and states for management of the transferred lands.

Since 1954, management of all lands purchased by the COE that have been transferred into the refuge has been governed by cooperative agreements between the Service and COE and individual states.

Refuge Mission Statement

As defined in the 1987 Refuge Master Plan the Refuge mission is:"To provide for the public benefits associated with fish, wildlife, and wild areas, by preserving the Upper Mississippi River floodplain ecosystem for the enjoyment and use of this

and future generations".

Refuge Resource Management Goals

1.) Environmental Quality - To preserve and enhance the environmental quality, wild character, and natural beauty of the river's floodplain ecosystem for the enjoyment and use of this and future generations.

2.) Migratory Birds - Provide the life requirements of waterfowl and other migratory birds occurring naturally along the Upper Mississippi River for the enjoyment and use of this and future generations.

3.) Fisheries and Aquatic Resources - Conserve and enhance the habitats of fish and other aquatic plant and animal life for the enjoyment and use of this and future generations.

4.) Other Wildlife - Provide the life requirements of resident wildlife species for the enjoyment of this and future generations.

5.) Endangered Species - Conserve, restore and enhance federally listed endangered and threatened species and the habitats upon which they depend for the enjoyment of this and future generations.

6.) Historic Preservation - Foster conditions under which prehistoric and historic resources can exist in harmony with the refuge mission and the social and economic uses of the Upper Mississippi River.

7.) Interpretation and Recreation - Gain active public support for the preservation of the vulnerable floodplain ecosystem; to provide interpretation and education opportunities; to provide a wide range of opportunities for compatible, wildlife/wildlands-oriented recreation; to allow other compatible traditional recreation uses.

8.) Public Involvement - Encourage the public and public agencies to play a vital role in the planning and management decisions of the Service for the Refuge.

Land Management Goals

From the list of Refuge goals the following are land management based with

specific objectives that utilize land management practices:

1.) Environmental Quality
   A. Preserve unique/or representative ecotypes.

2.) Migratory Birds
   A. Maintain or improve habitat of migratory waterfowl using the Upper Mississippi River.
   B. Promote use by the maximum number of species of migratory birds at optimum population levels to provide a recreation resource.
   C. Increase production of historically nesting waterfowl.

3.) Other Wildlife
   A. Maintain or increase species diversity and abundance.
   B. Maintain furbearer populations at levels compatible with fisheries and waterfowl management and other management objectives to provide a resource for recreation.

4.) Endangered Species
   A. Protect and enhance Upper Mississippi River habitat to maintain or increase its use by native species historically found in this area.
   B. Carry out the recommendations of Endangered Species Recovery Plans applicable to the refuge.

5.) Interpretation and Recreation
   A. Provide outdoor recreation opportunities oriented toward wildlife, fish and wildlands.

REFUGE MANAGEMENT OBJECTIVES

Prescribed Fire Management Objectives

As each District has their own special management considerations with regard to the use of fire, the goals and objective are listed by District.

Winona District

The prescribed fire management goal for Winona District is to maintain nesting cover for migratory birds and other wildlife species. To accomplish this goal the

District has established 9 units with the intent of burning each on a 3 year rotation which amounts to burning a total of approximately 70 acres a year.

The specific objective is to:

> Maintain cover for migratory birds and other wildlife in designated units established with native warm season grasses and forbs by reducing the percent frequency of cover types of non-native species by 10-30% by 2010.

La Crosse District

The prescribed fire management goal for La Crosse District is to maintain open grasslands for nesting cover for migratory birds and other wildlife species. To accomplish this goal the District has established 5 units with the intent of burning each on a 3 year rotation which amounts to burning a total of approximately 65 acres each year.

The specific objective is to:

> Provide cover for migratory birds and other wildlife in designated units by maintaining prairie plant species and other grasses and reducing the percentage of woody vegetation so that no more than 20 % of the cover is in this type by 2010.

McGregor District

One prescribed fire management goal for the McGregor District is to manage several of the District's moist soil units and wet meadows for the purpose of restoring and/or maintaining quality nesting, resting or feeding areas for waterfowl and other migratory birds. Historically, prescribed fire has been used by the District in such units to suppress the invasion of woody and undesired herbaceous vegetation and promote the growth of more preferred wetland species. Prescribed fire is also considered as a management option/technique for the goal of site preparation in bottomland reforestation projects. At the present time McGregor has designated 7 burn units with a total of 342 acres.

The specific objectives are to:

> Remove 70% of litter and top kill 50% of the woody vegetation on

previously tilled fields in preparation for planting mast crop trees. (Such project objectives would be completed with one burn.)

Remove existing litter from 70% of burn area in preparation for tree planting in bottomland hardwood reforestation sites. (Such project objectives would be completed with one burn.)

Increase the relative cover of desired moist soil species to 70% and reduce invasive woody species to less than 5% of vegetative cover within the moist soil units by 2015.

Increase relative cover of desired wetland species to 70 % and reduce/maintain woody species at or below 30% of vegetative cover in wet meadow units by 2020.

Savanna District

The prescribed fire management goals for Savanna District include burning to maintain nesting cover for migratory birds and other wildlife species. Another goal is to maintain existing dikes in a stable state by keeping them free of woody vegetation. To accomplish this goal the District has established 19 units with the intent of burning each on a 3 year rotation which amounts to burning a total of approximately 185 acres a year.

The specific objectives are to:

Improve upland nesting cover for migratory birds through enhancement of native prairie grasses and by reducing non-native grass species and brush by so that by 2010 they make up only 30% of the species in the designated units.

Maintain dikes in grassy cover by eradicating woody vegetation. Allow no more than 10% cover of woody species by 2010.

Wildfire Management Objectives

The objective for the wildfire program at Upper Mississippi River NWFR is to:

Suppress all unplanned ignitions by either direct or indirect attack, as soon as possible, to minimize risk to life and property.

FIRE MANAGEMENT STRATEGIES

As noted in the prescribed fire management objectives section of this plan fire can play an important role in land management. Fire is one of the most cost effective land management tools that can be used in upland habitats, in managing native prairie grasses and forbs and controlling exotic plants. The grassland plant community thrives when fire is used. Therefore, a well planned and monitored/evaluated prescribed fire management program will be in place at the Upper Mississippi River NWFR.

In addition to using fire on grassland plant communities it will also be used to maintain grass cover on dikes. Fire will help inhibit the growth of woody vegetation which if allowed to grow can compromise dike integrity. Fire use reduces the need for more expensive mechanical and/or chemical application. Fire will also be used for site preparation before planting mast producing trees and to control woody invasion into moist soil units.

All prescribed burns will be monitored and evaluated to ensure they are meeting the individual burn objectives and ultimately meeting Refuge goals. APPENDIX D lists the prescribed burn monitoring/evaluation format that will be used at each District. They include a burn critique, post-burn monitoring and follow-up evaluation.

Each burn unit is or will be monitored for fire effects by the use of transect sampling and photo stations. Monitoring will be conducted on a periodic basis. Systematic line transects, using quadrats or line intercept methods (Elzinga, et al, 1998), are used to determine frequency and dominance of species (e.g. little blue stem) and/or plant associations (e.g. warm season grasses, noxious plants, etc.). Photos stations are established on units smaller than a few acres in size.

Through this monitoring /evaluation process management can determine if the fire objectives are being met and will assist in the planning for future burns. Eventually it will identify whether or not the use of fire is accomplishing stated Refuge goals.

The Refuge will be prepared to suppress all unplanned ignitions, including an

escaped controlled burn, using direct or indirect attack techniques with Refuge personnel and/or with local fire fighting units some of which are under a Cooperative Agreement (see APPENDIX E for an example).

The District offices will work more closely with the local cooperators on an individual basis insuring total coverage. This will take time as there are countless fire department jurisdictions along the 261 mile stretch of river that includes the Refuge.

Due to the vegetative and physical characteristics of the Refuge most fires have/or will occur in fine fuels either in upland grasses, dried out marsh grass/sedge areas, near railroad right-of-ways or campfire sites. Under these conditions direct attack with pumper units and personnel with backpack pumps are possible. In some cases, due to fire intensity, indirect methods of attack may be necessary and backfires from established fuel breaks such as roads, wetlands dikes or waterways will be used.

Fires occurring on islands present a different problem as boats will have to be used to transport personnel and equipment to the fire. Portable pumps, backpacks and hand tools will be used in these situations to attack a fire. It should be noted that fires in the river bottoms is an unusual occurrence due to the moist conditions, vegetation types and lack of litter. When one does occur spread is generally slow.

Strategies to Meet Fire Management Objectives

1.) Prescribed fire will be used as a management tool for achieving resource management objectives.

2.) Properly monitoring and evaluate fire effects through the establishment of a monitoring system on each unit.

3.) Suppress all wildfires in a safe and cost effective manner consistent with resource and value risk. Suppression strategies and tactics will be unique to each incident depending on safety considerations, weather conditions, costs, fuel conditions, availability of resources, and values threatened.

4.) A system of roads, mowed breaks, wetlands, river sloughs and open water provide good fire breaks to aid in both wildfire suppression and prescribed

burning on the Refuge.

5.) A biological review will be done for each prescribed burn to note any sensitive natural resources in or near the proposed burn unit. This will include endangered or threatened species.

6.) Cooperative, agreements will be maintained to provide suppression actions on Refuge lands, and will define appropriate reimbursement where necessary. This point is extremely important as at this time all wildland fires and structural fires are attacked by the appropriate local fire department as the Refuge currently does not have enough red-card qualified staff member to fight wildfires. In the future the Districts will work more closely with the rural fire departments in their area of responsibility. It is hoped that the Rural Fire Assistance Fund will be expanded in the future to assist local fire departments with cost associated with fire fighting activities on Federal lands.

Limits

1.) All fire management program activities will be conducted in a manner consistent with applicable laws, policies and regulations.

2.) Suppression tactics may include both direct and indirect attack. No resources (e.g. plows, dozers, retardant drop, helicopter operations) are restricted on the Refuge except a 300' buffer zone should be maintained between a retardant drop and wetland area. Employment of suppression resources should be commensurate with the situation, weighing threats, costs and benefits. The decision to use or not use an available resource will fall in the hands of the incident commander or local fire department with advice given by the Refuge Resource Advisor.

3.) In attacking wildfires appropriate actions will be taken to protect the archaeological resources. This is discussed in detail in the wildfire section of this plan and in APPENDIX L.

4.) Currently, air quality has not been an issue in the Refuge's prescribed fire

program as the burns are small and the weather pattern and topography in this part of the continent lend themselves to good mixing heights and good dispersion of smoke. However, smoke management is always a consideration when planning a prescribed burn.

5.) Within the Genoa National Fish Hatchery, neither foam nor retardant will be used within 300 feet of the raceways or water collection points that supply the hatchery. This restriction will be included in any agreement with the Genoa Volunteer Fire Department.

FIRE MANAGEMENT PROGRAM RESPONSIBILITIES

Refuge Staff Responsibilities

The suppression of wildfire is given priority over all activities except the safeguarding of human life (910 DM 1.4E.T.SEQ). It is expected that all fire-trained Refuge employees will be available to assist with prescribed fire activities, as needed, on the Refuge. Fire-trained employees who are red-card qualified will be expected to assist with emergency suppression as long as it can be accomplished safely with the number of personnel available. Fire duty assignments will include only those duties for which each employee is qualified according to guidelines specified in the National Interagency Fire Qualifications Subsystem guide (PMS 310-1). Individuals must meet training, experience, and physical fitness requirements.

All staff are responsible for their own physical conditioning and if physically able, as determined by a physical exam, must qualify annually for fire activities by passing either the pack or field tests.

Complex Manager (Project Leader)

This position oversees and directs all Refuge operations including the development of the Fire Management Plan, annual prescribed burning plans and the funding requests that Districts make with regard to fire management activities. This position insures that there is consistency in training, fire planning and monitoring. Assists by providing biological staff for review of the FMP and annual prescribed fire plans. Aids in the development of Agreements with states for fire protection purposes when a state or more than one district is involved.

Managers (District Managers & Refuge Operations Specialists) & Wildlife Biologist

At the Refuge the District Managers are responsible for the full range of management duties within the District including fire management activities which implement an effective fire management program. Appropriate action will be taken by the District Manager for fires that occur within their land area of responsibility. Related fire management activities include delegation of authority, approval of prescribed fire operations (621 FW 1.5F) and development and approval of cooperative agreements with local fire departments.

They will be responsible for the day to day implementation of the fire program, to ensure fire readiness of staff, supplies, equipment and apparatus. As individual qualifications allow, they will serve as Refuge Resource Advisor, prescribed burn boss, equipment operator, prescribed fire crew member, or as initial and/or extended attack incident commander, or fire fighter on a wildfire.

They determine funding needs for normal unit strength and prescribed fire activities on the District using the FIREBASE system for fire funding. They plan the District's annual prescribed burn program and write the prescribed burn proposals. They insure that monitoring of the effects of fire activities on plant communities and substrate is conducted. They are also responsible for information and interpretation/education of District fire management activities where appropriate and for maintaining communications with the local cooperators.

The Wildlife Biologist will insure that species of special concern are not adversely impacted by a proposed prescribed burn.

Biological Technicians, Park Ranger & Maintenance Staff

These positions will maintain the fire related equipment and assist in the prescribed burning operations and, if qualified, the suppression of wildfires. The Biological Technicians will also establish and conducted the monitoring for burn units and if qualified write prescribed burn proposals.

Administrative Technicians

Responsible for posting of firefighter time and meeting procurement needs at the District during an on-going incident. Serves as dispatcher for on-going wildfires

and prescribed fires. Maintains a unit log during these events.

Cooperators

Will act on a wildfire by taking immediate suppression action in accordance with the written agreement with the appropriate District or under conditions set forth by the respective state.

FIRE SEASON

The entire Refuge is under the influence of a continental climate that is very changeable. Air masses from the polar region or warm south dramatically influence daily and seasonal temperatures and precipitation. The Refuge also is influenced by a microclimate due to it's location in the Mississippi River valley. This is more noticeable in the northern part of the Refuge where the elevation is approximately 500-600 feet below the surrounding uplands. This results in an earlier spring green up which can be a week or so ahead of the surrounding area and in the fall, conversely though not as noticeable, a week or so behind. Living in the valley there are many times in late spring and early fall when snow can be seen on the bluffs as the valley received only rain. During the spring, water levels are usually at their highest level. Most of the Refuge habitats are under water which results in limited fire possibilities. This occurs when the spring fire season is at it's highest in the surrounding uplands. There are basically two fire seasons the first begins in March and lasts through mid-May, after green-up occurs. The second begins in early October and lasts through November. Figure 3 is a Fire Season Map developed by the USDA.

In looking at the Refuge fire history some conclusions can be drawn as to why there have been so few fires even when considering the many factors that could lead to a fire start including; high public use with campfires allowed, proximity to railroads and the urban/private interface along 261 miles of boundary.

1.) In most years during spring fire season the Refuge is under or saturated with water. This is accentuated by the fact that the Locks and Dams System on the Upper Mississippi River holds the water table 6-9' above historical levels. This means that even after flood waters recede soils remain saturated. Fires occurring during this period tend to be contained quickly and held to a small size. However, fires that occur before river rise (March-mid-April) can and do exceed the 10 acre size.

2.) Flood waters in most years carry away leaf and vegetative litter, and also heavy fuels (e.g. logs, stumps branches etc.) and then deposits a fine silt over remaining vegetation in the forested areas. This reduces the possibility of fire starts immediately after flooding and also greatly reduces the chances of intense fires as heavy fuels are water saturated.

3.) Due to the extreme productivity of the bottomlands very dense stands of poison ivy and nettles grow each year. These species are not very burnable as there does not exist a fine fuel base underneath them. In the

bottomland forested areas it is moist with high humidity. All of these factors lessen greatly the chance of a fire start or the spreading of a wildfire.

4.) Because the Refuge, for the most part, is a system of braided streams and channels, wetlands and open water, if a fire does get started it isn't long before it runs out of fuel.

5.) New islands that form after the spring flood are composed of sand and are immediately over run with dense stands of annual moist soil plants and/or willow which is impossible to ignite.

In summary the Refuge is located in a minimal fire occurrence zone due to weather factors, and physical and vegetative characteristics. Thus, for the most part, even though the Refuge receives over 3.5 million visitors a year, fires are few and most are contained after burning one acre or less.

Fire Frequency

As noted earlier in this plan the fire frequency on the Refuge is low with most fires occurring in the spring. The Fire History section of this plan discusses in detail the wildfire history on the Refuge.

EQUIPMENT AND STAFFING

Current Staff and Qualifications

Current staff and qualifications for each District are found in APPENDIX F.

Employee Contact List

Employee Contact List for each District can be found in APPENDIX G.

Equipment

Equipment required for the current wildfire and prescribed burning program for each District are listed in APPENDIX H. At the beginning of the spring fire season and during extreme conditions the appropriate fire equipment will be readied to go.

Training

The Regional Office will pay for all approved fire training if the following criteria

are met:

1.) The training is approved by the employee's supervisor and the Regional Fire Management Coordinator.

2.) A copy of the Certificate of Completion and travel voucher are sent to the Budget Assistant for Refuge Operations in the Regional Office.

In addition the Fire Management Officer (FMO) will be notified so the course may be entered into the employees Fire Management Information System (FMIS) Qualification training history.

Each year there will be an in house refresher training for all staff members at each District. It will concentrate on personal safety, use of fire ignition, use of fire fighting hand tools and equipment. Practical exercises will be included.

Physical Fitness

All personnel involved in fire management activities are required to pass an annual wildland fire work capacity test commensurate with the fitness requirement for the positions to which they will be assigned. Work capacity tests will not be given to anyone who has obvious physical conditions or known heart problems that would put them at risk. All individuals are required to complete a pre-test Physical Activity Readiness Questionnaire (PAR-Q) prior to taking a physical fitness test. They must read and sign the PAR-Q health screening questionnaire, and informed consent form. If an employee cannot answer "NO" to all the questions in the PAR-Q health screening questionnaire the test administrator will not administer the test.

Physical Exams

All individuals over 40 years of age involved in arduous fire management activities must have an annual physical examination prior to taking the work capacity test, in compliance with national and regional safety standards. In addition the Project Leader and/or District Manager can require physical examinations for those under 40 if he/she deems it necessary. The cost of the examination will be born by the Service and results should be kept on file in the Regional Personnel Office.

Weather

Winona, La Crosse and McGregor Districts receive spot weather forecasts from the National Weather Service office located in La Crosse, Wisconsin. This office can also provide the current Keetch-Byram drought index. The office has also been recently upgraded with new equipment including a Dopler radar. They have always provided very reliable weather information as it relates to prescribed burning. Savanna District receives weather forecasts off the internet. Where possible actual weather conditions on the fire will be reported back to the La Crosse weather office. This will assist them in providing more accurate weather information in the future.

During periods of extreme fire danger the District Manager, with Project Leader approval, will notify the designated FMO for the Refuge who in turn will notify the RFMC that Refuge firefighting resources are not available for off-unit assignments. Once local fire conditions moderate fire qualified individuals can again be made available for Regional and National needs.

Emergency Presuppression

During periods of extreme or unusual fire danger, activities are identified which will provide for additional coverage and protection. Appropriate activities for emergency presuppression funds include hiring of emergency firefighters, extending tour-of-duty, authorizing scheduled overtime or premium pay beyond regularly scheduled hours, extending types and tours of detections, and positioning resources. These procedures will be guided by the District Step-Up Plan as shown in APPENDIX I. The Step-Up Plan is based on the daily Fire Danger Rating established by the National Interagency Fire Center.

Regional and National Preparedness

The regional preparedness level tends to follow the national preparedness level unless the Midwest is experiencing very dry or very wet weather compared to the rest of the country. Expect normal Refuge operations to occur through Preparedness Level III. At Preparedness Level IV, the Refuge will seek approval through the RFMC for proposed prescribed burns. At Preparedness Level V, no prescribed burns are permitted, based on FWS policy (621 FW 3.9).

WILDFIRE PROGRAM

Fuel Types, Distribution and Status

The National Wildfire Coordination Group (NWCG) Fuel Models For Estimating Fire Behavior are used for the Refuge program. The models are used in preparing burn prescriptions and predicting fire behavior.

Grass types which including native prairie, reed canary and Phragmites fall into fire behavior model (FM) 3 (grass group). This model is included as APPENDIX J. This is characterized by the most flashy of the fuels on the Refuge and the most dangerous from a safety standpoint due to length of head fires and fire intensity.

Uplands not covered by grass types are associated with FM 9 (timber group), see APPENDIX K. This includes the majority of the Refuge and fires are extremely rare in this habitat type due to the lack of fine fuels and moist conditions. Most litter and heavy fuels are washed away each spring during the high water period and remaining heavy fuel are water saturated. If a fire does occur it will spread slowly with a low head and intensity.

All firefighters will wear the proper protective clothing and be familiar with escape routes and use of the fire tent shelter.

Topography and Weather

As noted the Refuge is mainly composed of wetland types either marshland or forested. However, there are scattered rolling grasslands which occur on sandy soils. Care must be used when driving vehicles off roads to prevent getting stuck creating an entrapment situation.

On occasion the entire Refuge or a portion of it many experience a drought which could cause extreme fire behavior in those areas that support grassland or marshland type vegetation. If a wildfire occurs under these conditions indirect attack may be more appropriate.

On average, the days posing the greatest threat of a wildfire, and to personnel safety, are days in early spring during a dry period on the existing grasslands or in the bottomlands before the spring River rise, when pool elevations are low, and winds are above 10 MPH.

Prevention

The Refuge's prevention program will be through its public use program by informing and educating Refuge users, in particular the campers and those picnicking on islands, to fire safety. News releases and signing, if necessary will also be used advising the public on fire danger.

Detection

Only a small part of the Refuge is included in any State detection service and that is rare. The portion of the Refuge located in Wisconsin is included in DNR's flight pattern for fire detection if fire conditions reach the high to extreme level and a local fire department or the DNR requests a flight. This is only done if there are resources available. Most fires would be reported by Refuge users or neighbors to a District Office or the local sheriff or fire department.

Fire Suppression

At this time all wildfires occurring on the Refuge will be initially attacked by a local cooperator or fire department who will have complete charge of the fire suppression actions. Once the District is notified of an ongoing wildfire a Refuge Resource Advisor will be immediately dispatched to the fire scene. This person will provide the cooperator with all necessary information regarding resources to protect, special hazards and other pertinent information contained in this plan. This person will insure that all needed information outlined in this section is collected and reported properly. Information will also be collected for those fires that are out by the time the Refuge Advisor arrives.

When Federal forces take action on wildfires Service policy requires the Refuge to utilize the Incident Command Systems (ICS) and firefighters meeting NWCG qualifications for fires occurring on the Refuge. All suppression efforts will be directed towards safeguarding life while protecting the Refuge's resources and property. Mutual aid resources responding from cooperating agencies will not be required to meet NWCG standards, but must meet the standards of their respective agencies. Mutual aid forces will report to the Incident Commander (IC) when reporting to a fire, and receive first priority for release from the fire.

The goal of fire suppression at the Refuge is to safely suppress wildfires at minimum cost, consistent with the values at risk, while minimizing the adverse impacts resulting from suppression activities. All unplanned ignitions, including natural and human-caused ignitions, on the Refuge will be suppressed. Wildfires will take precedence over other activities on the Refuge while they are active. Suppression objectives, in order of priority are:

1.) Protect human life, including the fire management personnel involved in suppression operations.

2.) Protect Refuge buildings, structures, facilities and improvements, private property and the environment outside of the Refuge.

3.) Protect threatened and endangered species, and natural and cultural resources.

Efforts to control wildand fires (including prescribed fires that get out of control) are subject to Section 106 of the National Historic Preservation Act. We will meet our obligations under this act in the following ways:

When land covered by a wildfire has been inventoried to identify cultural resources, and the cultural resources have been evaluated for significance according to the criteria for the National Register of Historic Places, the Fire Management Officer will direct ground disturbing fire suppression efforts around (will avoid impacting) historic properties. Nevertheless, evidence of a preciously undetected cultural resource may be enountered. The District Manager will immediately notify the Project Leader who in turn will notify the Regional Historic Preservation Officer (RHPO). The RHPO will take immediate steps to have the cultural resource evaluated and protected, as appropriate, to the extent required by law and policy. This may require arranging for a qualified professional to visit and evaluate the site's importance and recommend a course of action. An evaluation and decision on the disposition of the cultural resource should be made within 48 hours of the discovery unless the project's schedule allows greater flexibility.

When land covered by a wildfire has not been inventoried for cultural resources and wildfire suppression activities do result in ground disturbing activities, we will take the following action. Soon after fire control, the project leader will contact the RHPO to arrange for an archeologist to investigate the disturbed areas to determine if sites were affected.

Refuge operations and maintenance funds (subactivity 1261) will pay the cost of these activities unless the action is an emergency archeological and historic property survey in unstable areas prone to further degradation (i.e., erosion) following a wildland fire or in association with an emergency fire rehabilitation treatment. Emergency archeological and historic property surveys in unstable areas prone to further degradation (i.e. erosion) following a wildland fire or in association with an emergency fire rehabilitation treatment, and archeological, historic structure, cultural landscape, and traditional cultural property resource stabilization and rehabilitation can be funded with emergency rehabilitation funding (subactivity 9262). This same information is attached as APPENDIX L.

Initial Reporting and Dispatching

During working hours fires would be reported to a District Office by either the general public, a law enforcement agency or local fire department. After hours a prearranged District contact would receive the report from either the local law enforcement agency or local fire department.

Fires which occur during the work hours will be attacked by an appropriate local fire department or properly red-card qualified District personnel.

The person receiving the report will be responsible for implementing the Fire Dispatch Plan for the District see APPENDIX M, and assume duties of Fire Dispatcher until relieved or released. For a fire on Refuge lands the dispatcher will remain on duty until:

1.) All District resources return.
2.) Relieved by another dispatcher.
3.) Released from duty by the IC or Refuge Resource Advisor.

The fire dispatcher will be responsible for coordinating the filling and delivery of any resource orders made by the IC or Refuge Advisor for all operational and logistical needs.

When fire danger is classed as “high” to and including “extreme” on the District, the office will notify the appropriate cooperators telling them who the District contact person is in the event of a fire. The cooperators will have current copy of the Call-Up List. see APPENDIX N, which they can use to contact District staff.

Communications

APPENDIX O, contains a list of communications frequencies, channel assignments and cell phone numbers commonly used by each District Office. Clear text will be used during all communications.

Initial Attack

All fires occurring on the Refuge, if not attacked by a cooperator, will be supervised by a qualified IC if attacked by Service or a red-carded team. The IC or local cooperator will be responsible for all management aspects of the fire. All resources will report to the IC (either in person or by radio) prior to deploying to the fire and upon arrival to the fire.

Upon arrival the IC or local cooperator, with the assistance of the Advisor, will be responsible for completing a size-up of the fire and the following information:

Location (legal description and general directions that may be needed by others to find the fire)
Size (acres)
Fuels burning
Fire Behavior (creeping, running, spotting, etc.)
Additional resources needed

Limits

The IC or cooperator, through the Refuge Resource Advisor, will receive general suppression strategy from the Fire Management Plan (including archeological information), but appropriate tactics used to suppress the fire will be up to the IC or cooperator to implement. Minimum impact suppression tactics will be used whenever possible. If application of retardants are called for there should be a minimum of a 300' buffer between the drop area and wetlands.

Escaped Fires/Extended Attack

Whenever it appears a fire will escape initial attack efforts, leave Service lands, or when fire complexity exceeds the capabilities of command or operations, the IC, or local cooperator fire chief through the Refuge Resource Advisor will take appropriate, proactive actions to ensure additional resources are ordered. The IC

or Refuge Resource Advisor, through the District dispatch, or other means, will notify the RFMC of the situation. The RFMC will assist the District Manager in completing an Escaped Fire Situation Analysis (EFSA) and Delegation of Authority (FWS Wildfire Suppression Operations Handbook, 3.2-7 to 3.2-19 & 3.2-25).

In addition to the above actions the IC or District Manager should request assistance by contacting the following Dispatch Center:

Winona District - Jim Fletcher 218/327-4569

La Crosse District - Steve Holdsambeck 715/362-1341 or
Steven Radaj 715/358-6863

McGregor District - Lyn Carpenter 573/364-4621 Ext. 48 or
Chris Aaccetturo 573/364-4621 Ext. 48

Savanna District - Chuck Murphy 618/687-1731

These contacts are also included in APPENDIX M.

Mop-Up and Rehabilitation

The Upper Mississippi River NWFR has no rehabilitation plan. Fire line is rarely constructed on the Refuge and direct of indirect attack by pumper units, portable pumps and personnel is most likely to be the tactic employed on fires. The IC or District Manager will be responsible for any mop-up and/or rehabilitation actions deemed necessary on the Refuge.

Refuge fires will be monitored until declared out.

Reports and Records

The IC or District Manager will be responsible for obtaining a fire number. They will also be responsible for completing the DI-1202 Fire Report, Crew Time Reports. a list of all expenses and/or items lost on the fire, and a list of personnel assignments. The IC will ensure that data is entered into FMIS within 10 days after the fire is declared out.

PRESCRIBED FIRE PROGRAM

Over the past 25 years fire has been used on the Refuge successfully to maintain and encourage grassland including the growth of native prairie plant species. In addition fire has been used successfully to maintain grassland on important multi-million dollar dike complexes. Fire reduces wood vegetation which if allowed to grow could compromise dike integrity. Fire has also beenused for site preparation for planting mast crop trees and reducing woody vegetation in moist soil units.

With the successes of past burns it is the intent of the Refuge to continue to use fire as an important management tool to: maintain remnant native grasslands; retard willow and other woody vegetation encroachment; maintain grass on important dikes; and for site preparation. Therefore, work priority will be given to the accomplishment of a burn when it falls within prescription, and all qualified staff will participate.

Resource Management Goals & Objectives

Following are the goals and objectives relating to the use of fire by District:

Winona District

The prescribed fire management goal for Winona District is to maintain nesting cover for migratory birds and other wildlife species. To accomplish this goal the District has established 9 units with the intent of burning each on a 3 year rotation which amounts to burning a total of approximately 70 acres a year.

The specific objective is to:

> Maintain cover for migratory birds and other wildlife in designated Fire Management Units established with native warm season grasses and forbs by reducing the percent frequency of cover types of non-native species by 10-30% by 2010.

La Crosse District

The prescribed fire management goal for La Crosse District is to maintain open grasslands for nesting cover for migratory birds and other wildlife species. To accomplish this goal the District has established 5 units with the intent of burning each on a 3 year rotation which amounts to burning a total of approximately 65

acres each year.

The specific objective is to:

> Provide cover for migratory birds and other wildlife in designated units by maintaining prairie plant species and other grasses and reducing the percentage of woody vegetation so that no more than 20 % of the cover is in this type by 2010.

McGregor District

One prescribed fire management goal for the McGregor District is to manage several of the District's moist soil units and wet meadows for the purpose of restoring and/or maintaining quality nesting, resting or feeding areas for waterfowl and other migratory birds. Historically, prescribed fire has been used by the District in such units to suppress the invasion of woody and undesired herbaceous vegetation and promote the growth of more preferred wetland species. Prescribed fire is also considered as a management option/technique for the goal of site preparation in bottomland reforestation projects. For the District 7 burn units have been designated.

The specific objectives are to:

> Remove 70% of litter and top kill 50% of the woody vegetation on previously tilled fields in preparation for planting mast crop trees. (Such project objectives would be completed with one burn.)
>
> Remove existing litter from 70% of burn area in preparation for tree planting in bottomland hardwood reforestation sites. (Such project objectives would be completed with one burn.)
>
> Increase the relative cover of desired moist soil species to 70% and reduce invasive woody species to less than 5% of vegetative cover within the moist soil units by 2015.
>
> Increase relative cover of desired wetland species to 70 % and reduce/maintain woody species at or below 30% of vegetative cover in wet meadow units by 2020.

Savanna District

The prescribed fire management goals for Savanna District include burning to maintain nesting cover for migratory birds and other wildlife species. Another goal is to maintain existing dikes in a stable state by keeping them free of woody vegetation. To accomplish this goal the District has established 19 units with the intent of burning each on a 3-year rotation which amounts to burning a total of approximately 185 acres a year.
The specific objectives are to:

> Improve upland nesting cover for migratory birds through enhancement of native prairie grasses and forbs and by reducing non-native grass species and brush by 2010 so that these species make up no more than 30% of the total in the designated Fire Management Units.
>
> Maintain dikes in grassy cover by eradicating woody vegetation. Allow no more than 10% cover of woody species by 2010.

Hazardous Fuel Reduction

At this time there are no goals or objectives stated for hazardous fuel reduction on the Refuge. From the stand point of fire safety, hazardous fuel reduction is not an issue in heavy fuels. Downed woody fuels are generally moved out of the backwaters during the spring high water period. Most of the heavy fuels remaining get water soaked every year so they do not have a chance to completely dry out. Also due to the high moisture content they deteriorate very rapidly in the river bottoms. There is one area in the La Crosse District which will be reviewed by the FMO for possible hazard reduction in and FM 3 area. If a prescribed fire is recommended for the area to reduce the fuel load it will be added to this plan.

Use of Fire to Achieve Resource Objectives

Fire will hopefully accomplish the above stated objectives for each District over time. If the past is any indication it will. Continued evaluation of the results will help refine the prescribed burning program. As monitoring results are evaluated and analyzed management objectives may be changed to more realistically achieve the goal.

Limits

Variables that limit the Districts' ability to accomplish their objectives to burn are primarily weather, and enough qualified personnel and/or equipment. With weather being the greatest limiting factor the Districts will aggressively use fire to meet objectives when windows of opportunity exist.

Prescriptions are written to manage smoke in such a way as to have minimal impact on public roads and Refuge neighbors. This includes limiting wind speeds, directions and following appropriate standards for smoke dispersion levels.

During a prescribed burn District personnel will make sure no visitors are on or near the burn unit and they well be kept clear of the burn area. This should not be a problem as most of the burn units are small in size.
Local conditions may impact the prescribed burn program. When conditions reach an extreme state, a "Burning Ban" may be ordered by a State. During official bans which cover a particular District or Districts they will not burn. The District will obtain any and all necessary permits prior to conducting a management ignited prescribed burn, and comply with State regulations governing open burning. When the Keetch-Byram Drought Index exceeds 500, no prescribed burning will be conducted.

There are Federal and State Threatened and Endangered Species that occur on the Refuge. At this time none of these species occur on any proposed prescribed burn unit and none of the units considered critical habitat. However, for each annual prescribed burn plan the units proposed for burning will have a biological review completed and if warranted an "intra-Service Section 7 Biological Evaluation Form" will be prepared. This will insure that there are no negative impacts to the designated species.

Preparation for prescribed fires such as constructing fire lines are subject to Section 106 of the National Historic Preservation Act. The procedures in the Notice dated December 8, 1999, "Historic Preservation Responsibilities", apply to the planning and preparation for conducting prescribed fires. Included in APPENDIX L.

On the Districts, preparation for prescribed fires consists of mowed fire breaks which tie into natural (e.g. water, river) or manmade fire barriers (e.g. roads, dikes, ditches). This should cause no problems with known Archeological sites.

Each District will not conduct more than one prescribed burn simultaneously.

Burning Season

Prescribed burning plans can be written to burn anytime of the year as long as conditions are "in prescription". However, historically most of the burning occurs in the months from March through May. This time period is expected to remain as the favored burning window with some thought of future burns occurring in late summer for better woody vegetation control.

Complexity

Complexity elements will be used to define the relative complexity of all prescribed fire projects(FWS Fire Management Handbook, 2.2.6). For the eight complexity elements listed in APPENDIX P, users assign a complexity score of 0, 1, 3, 5, 7 or 9, based upon the rating criteria described in every respect, a station will have to use its best judgement to determine which is most appropriate. Each prescribed burn does not have to meet all listed rating criteria for a particular numeric score to qualify for that rating. Each higher category includes all the rating criteria listed for the previous categories.

These rating criteria will be used for all prescribed fires, regardless of size. The complexity score will be included on the Fire Report (DI-1202) in the "Remarks" section. Post-fire complexity ratings are used to compile a summary complexity score for the normal prescribed fire year, which is used in the FIREBASE budget analysis for funding and staffing needs.

The overall rating is assigned as either low, moderate or high, based on the potential risk, potential consequence, and technical difficulty of each element. These in turn help to establish the degree of complexity that is involved, whether or not the resources at the District can mitigate a planned burn that pose special problems or concerns.

Planning

Planning for each burn season begins the year prior to that season. Burn projects will be planned by the District Manager and staff based on the goals and objectives of this plan. Budgets will be planned and submitted, by assigned deadlines,

through the Project Leader into FIREBASE.

Burn proposals will be written that will document the treatment objectives, the prescription, and the plan of action for carrying out the burn. These plans may be written by any qualified burn boss on the District staff. The burn plan will follow the format in the FWS Fire Management Handbook, and address all elements specified. All burn proposals will be reviewed by the Project Leader and/or appropriate staff, then reviewed by the Fire Management Officer assigned to the Refuge. It is then sent back for Project Leader and District Manager approval.

Preparation and Implementation

Preparation of prescribed burn units will be given high priority as the fire season approaches. Most units are bordered by roads, dikes or water. If additional breaks are necessary they will be established by mowing. The unit boundaries are checked for any dead and hazardous trees and removed to reduce the chance for spotting. Removal also reduces the need for extensive mop-up at these sites.

Prescribed burns can be conducted at any time as described on the individual approved burn proposal. Generally, most burning will be accomplished in the months between March through May.

Monitoring and Evaluation

Fires are monitored/evaluated using the format shown in APPENDIX D. Following each burn, a critique of the burn will be conducted. Within five days after a burn, burn severity data will be collected (APPENDIX Q). Grassland monitoring will be conducted 3-5 months after the burn. The follow-up evaluation will be conducted during the growing season following the year of burn.

As stated previously each burn unit will be monitored for fire effects by the use of transect sampling and/or photo stations. Monitoring will be conducted on a periodic basis. Systematic line transects, using quadrats or line intercept methods (Elzinga, et al, 1998), are used to determine frequency and dominance of species (e.g. little blue stem) and/or plant associations (e.g. warm season grasses, noxious plants, woody vegetation etc.). Photos stations are established on units smaller than a few acres in size. Through this monitoring /evaluation process management can determine if the fire objectives are being met and will assist in the planning for future burns. Eventually it will identify whether or not the use of fire is

accomplishing stated Refuge goals.

This process may also identify the need for more detailed monitoring or research needs to help evaluate the effectiveness of the prescribed fire program.

Funding for the evaluation of fuels management and project effectiveness is now available as per the Fire Management Handbook (2.2.4). The Refuge will apply for these funds to help in the establishment of a proper prescribed burn monitoring program designed to document the project effectiveness.

Dispatching

During management ignited burns, there will be a dispatcher on duty at all times. The dispatcher will record activities, times and progress of the burn in a log and remain on duty until:

1.) All District resources are released from the burn.
2.) Relieved by another dispatcher.
3.) Released from duty by the Burn Boss.

FIRE MANAGEMENT UNITS

Before discussion of the Fire Management Units (FMUs) it again should be noted that at this time all wildfires that occur on the Refuge will be attacked by the appropriate local fire department. Each District Office will insure that all Refuge lands are covered for initial attack. If a fire exceeds the capacity of the local fire department the District Manager will start the request process for additional support which could include a call to the appropriate Interagency Dispatch Center.

Refuge Fire Management Units will be broken down as follows:

The Refuge is shown on maps (Figures 4-21), which outline the burnable areas of the Refuge. Areas designated as prescribed burning units are noted with a yellow dot. A detailed discussion beyond what is written here including specific fire behavior issues and safety considerations will be done for each burning unit and included in the annual prescribed burning plan. At this time 40 areas have been identified as a prescribed burn unit. The units and acreage by District are listed below:

Winona District

Barton/Lofgren	120.0 Acres
Crats Island	5.4 Acres
Grand Encampment	3.2 Acres
Finger Lakes	5.0 Acres
McNally	25.0 Acres
Polander	1.4 Acres
Prairie Island	14.0 Acres
Swan Island	10.0 Acres
Wabasha Prairie	30.0 Acres

La Crosse District

Upper Halfway Creek Marsh	60.0 Acres
Midway RR Prairie	5.0 Acres
Mathy Prairie	13.0 Acres
Millers Wet Meadow	120.0 Acres

McGregor District

Dego Slough	24.0 Acres
Guttenberg Ponds	35.0 Acres
John Deere Marsh	35.0 Acres
Patzner	12.0 Acres
Quality Beverage Tract	21.0 Acres
Turkey River Bottoms	125.0 Acres
Whalen Tract	90.0 Acres

Savanna District

Unit 1	14.0 Acres	Unit 11	48.0 Acres
Unit 2	35.0 Acres	Unit 12	30.0 Acres
Unit 3	16.0 Acres	Unit 13	80.0 Acres
Unit 4	10.0 Acres	Unit 16	35.0 Acres
Unit 5	20.0 Acres	Unit 18	40.0 Acres
Unit 7	95.0 Acres	Unit 19	3.5 Acres
Unit 8	52.0 Acres	Unit 20	5.0 Acres
Unit 9	36.0 Acres	Unit 21	8.0 Acres
Unit 10	14.0 Acres	Unit 22	10.0 Acres
		Unit 23	5.0 Acres
Total Acres			1,310.5 Acres

The Refuge is broken into basically two fire behavior types one is vegetation associated with Fire Behavior Fuel Model (FM)3 (grasslands) and the other FM 9 (bottomland hardwoods).

The grassland, Phragmites, cattail, reed canary and other fine fuel areas fall in the FM 3 category. These fuels can ignite and carry a fire easily. Fire can spread quickly and with great intensity depending on weather and fuel conditions. The taller, coarser fuels will burn with greater intensity and fire spotting could be a problem depending on the relative humidity and wind conditions.

Another factor to consider when fighting a fire in reed canary, Phragmites and cattails is the normally water logged ground conditions. When attacking a fire off-road care has to be taken so vehicles do not get stuck and in danger of being overrun by fire. Also many of the upland grass areas are on sandy soil where again care must be taken in an off road situation that you do not get stuck in the sand

and overrun by a fire.

Taking the above into consideration direct attack methods are still used in most wildfire situations. In more intense fires indirect attack with the use of backfires would be the proper suppression tactic.

Periods of drought as measured by the Keetch-Bryan Drought Index can impact fire behavior and intensity in this fuel model. More fuel can be available to burn through the drying process making the fires more intense and in some areas organic soils could ignite making for a difficult mop-up situation and possible flare-ups. This situation has never happened on the Refuge as for the most part the water table is artificially high due to the Locks and Dams. Also most of the upland grasslands occur on very thin soils thus eliminating the possibility of an organic fire. However, if the situation warrants, additional resources will be called to handle a wildfire burning in organic material if it is beyond the control of a local cooperator.

The prescribed burn units at this time are all associated with FM 3 and all will have adequate breaks around them prior to the burn. These will be either natural or manmade. Any special considerations related to fire behavior or safety will be discussed in the unit burn proposal. The parameters of the prescribed burn proposal for the unit will be followed to minimize the chances of having an escaped fire.

The forested areas fall into FM 9. Fires in this type will normally burn slowly with little intensity. Direct attack methods with pumper units or personnel with back pack pumps and hand equipment is almost always used to suppress wildfires in this fuel model. There is little chance of heavy downed fuels igniting due to the wet conditions.

Under severe drought conditions it is expected that fires will be more intense but again because heavy fuels are saturated every year during the spring run-off the river bottom forests will not experience what a surrounding upland forest would in terms of burning condition under the same drought conditions. Also the islands for the most part are very sandy with a light organic layer so organic fires would be rare. As above if the situation warrants, additional resources will be requested to assist in the suppression of a wildfire that is experienced in drought conditions and cannot be controlled by a local cooperator.

Future prescribed burn units which do not fall in the FM 3 category will be

analyzed in detail in the burn proposal. All approved burn plans will be followed to assure a minimum risk of fire escape and that the burns are accomplished in a safe manner.

The locks and dams on the river maintain certain pool elevations for the navigation season. This management regime has maintained a high ground water table, 6-9' above historic levels, on the Refuge regardless of weather conditions.

The Districts will follow the drought index closely and also the Daily Fire Danger Rating established by the National Interagency Fire Center and will call for additional resources as outlined in the Districts' Step-Up Plans.

ADDITIONAL OPERATIONAL ELEMENTS

Public Safety

As noted the Refuge receives 3.5 million visitors a year. A majority of these visits occur during the summer season, so fires, except for an escaped campfire, are very rare. There is also heavy use in the fall which usually involves waterfowl hunting and again a fire in the marsh areas that could impact users would be rare. However, if the fire danger index climbs to the very high or extreme level the states have been known to close the hunting season, which would also occur on the Refuge. In addition fire danger signs/information will be posted if it is in the high or above category at all lands and access points on the Refuge. Also news releases will be issued as to the fire danger potential.

As major highways run parallel to the Refuge boundary in many areas smoke management could be a problem. If a wildfire occurs where this is a problem, the appropriate law enforcement agency will be contacted to help direct traffic.

Public Information Education

Informing the public is an important part of the Refuge's prescribed burning program. News releases have and will continue to explain the program. Where appropriate, interpretive signs will be placed to help educate the public as to the value of prescribed burning as a management tool and the benefits obtained.

Annual Fire Plan Review

The Fire Management Plan review and/or revisions will take place at a minimum of 5-year intervals, or when significant changes are proposed (621 FW 2.3.A.4). Call-up lists will be updated, any changes identified from the previous fire year will be made, and cooperative agreements will be reviewed, prior to February 1, of each year. Changes will be made and forwarded to the Fire Management Coordinator.

Fire Critique and Review

All wildland fires, including prescribed burns, and fire-related incidents, are subject to review, according to FWS guidelines (See Wildfire Suppression Handbook, 3.4 for complete guidelines). As all wildfires and prescribed burns (within planned perimeters) have been contained with no unusual events having occurred, the signed DI-1202 will serve as sufficient documentation of an informal review.

Each year the past fire season will be reviewed by District staff. This will occur at a regularly scheduled staff meeting and have the following objectives:

1.) Examine whether program goal/objectives are/or have been met.
2.) Identify new or improved procedures, techniques or tactics. Discuss this on a Refuge-wide basis.
3.) Refine the fire management program on the District/Refuge.
4.) Examine the cost effectiveness of the fire management program both District and Refuge-wide.
5.) Define areas that will improve the District/Refuge fire management program.

Air Quality & Smoke Management Guide

The effect of smoke and air quality is not a big concern to neighbors. Burning prescriptions are written to take into account the effects of smoke and air quality. The Refuge will comply with all applicable Federal, State, interstate and local air pollution control requirements, as specified within Section 118 of the Clean Air Act, as amended (42 USO 7418). In addition, further guidance can be found in the Prescribed Fire Management Handbook, Section 2.4.pp.1-7.

All prescribed burns will adhere to the following smoke management guidelines:

1.) Obtain any required State or local open burning permit.

2.) The burn will be conducted according to the terms and conditions of permits and the prescription in the prescribed burn plan.
3.) Prescriptions will be written to achieve mixing heights that will disperse smoke at upper levels to minimize impacts of smoke at ground level.
4.) No burning will occur if a state agency for air quality or other governing agency has issued an air pollution health advisory, alert, warning or emergency. This would be a very rare occurrence along the river.

FIRE RESEARCH NEEDS

Currently there are no fire research programs ongoing or needed on the Refuge. This may change as fire management results are analyzed.

CONSULTATION AND COORDINATION

The intent of the Refuge's fire management program is to support the accomplishment of its management goals and objectives, thus protecting and enhancing its natural resources for the enjoyment of the public. In the pursuit of this, all applicable Federal and State authorities will be adhered too.

Coordination of the fire management program has/will involve appropriate Corps of Engineers personnel from both the St. Paul & Rock Island Districts. As mentioned earlier in this plan the COE is now in the process of developing policy with regard to fire management. If their policy involves cooperative agreement lands and differs from what is stated in this plan it will be amended accordingly. The Service will work closely with the COE in this respect. The result in any case will be the mutual management and protection of all Federal lands that are part of the Upper Mississippi River valley.

In addition, personnel from the States of Minnesota, Wisconsin, Iowa and Illinois will also be involved in fire management planning. Many coordination meetings are held annually between the River biologists from all agencies where River management is discussed. State policy with regard to fire protection on Federal lands will be reviewed and if possible agreements made at the state level. This might be appropriate for all Service lands within a particular state.

In some cases State and/or COE personnel can participate in prescribed burns on the Refuge if trained to do so in accordance with their agency guidelines.

McGregor District also coordinates its fire management program with the staff of the National Park Service at Effigy Mounds National Monument. Qualified personnel from their office have assisted the District with their prescribed burning operations.

All Districts will work very closely with local fire departments. In 2001, four rural fire departments in Minnesota received funds from the Rural Fire Assistance Fund pilot program. All have signed a cooperative agreement to attack wildfires on the Refuge (Winona & La Crosse Districts). It is hoped that this program is expanded in the future so all appropriate rural fire departments can participate. The local cooperators will also be informed of prescribed burns in their area of responsibility and about other fire management concerns. They too, if willing, can provided personnel to work on a prescribed burn as long as they are trained and physically able to do so in accordance with their agency guidelines.

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Elzinga, C.L., D.W. Salzer and J.W. Willoughby, 1998. Measuring and monitoring plant populations. BLM Technical Reference 1730-1, Denver, CO. 492 pp.

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Wisconsin DNR Website- www.state.wi.us

LaCrosse National Weather Service Office Website- www.crh.noaa.gov/arx/firewx.html

U.S. Forest Service Website- www.fs.fed.us/land/wfas/fd_class.gof

Appendix B.

Federal, State and Fish and Wildlife Service status species presently breeding (indicated by *) on the Upper Mississippi River National Wildlife and Fish Refuge or using the Refuge during a portion of its life history. 07/01.

T = Federally Threatened, E = Federally Endangered, ST = State Threatened, SE = State Endangered, C = Federal Candidate Species, SSC = Species of Special Concern (from State Lists). The following codes are from FWS Region 3 Conservation Priorities List, 1998: RD = Rare/declining; Rec = Recreational or economic value; N = Nuisance

Species	Region 3 Conservation Species	Illinois	Iowa	Minnesota	Wisconsin
Pied-billed Grebe*		ST			
Horned Grebe				ST	
Red-necked Grebe					SE
Am. White Pelican				SSC	
Double-crested Cormorant*	N				
American Bittern*	RD	SE			SSC
Least Bittern*	RD	ST			
Great Egret*					ST
Snowy Egret		SE			SE
Little Blue Heron		SE			
Black Crowned Night Heron*		SE			SSC
Yellow-crowned Night Heron*		SE			ST
Snow Goose	N, Rec				
Giant Canada Goose*	Rec				
Trumpeter Swan*	RD, Rec			ST	SE
Wood Duck*	Rec				
American Black Duck*	Rec				
Mallard*	Rec				
Blue-winged Teal*	Rec				
Canvasback	Rec				
Osprey*		SE			ST
Bald Eagle*	T	ST	SE	SSC	
Northern Harrier*		SE	SE		
Red-shouldered Hawk*	RD	ST	SE	SSC	ST
Swainson's Hawk		SE			
Peregrine Falcon		SE	SE	ST	SE
King Rail		SE	SE	SE	
Common Moorhen		ST		SSC	
Sandhill Crane*		ST			
Piping Plover	E	SE	SE	SE	SE
Upland Sandpiper*		SE			
American Woodcock*	RD, Rec				
Franklin's Gull				SSC	
Caspian Tern					SE
Common Tern		SE		ST	SE
Forster’s Tern*		SE		SSC	SE
Black Tern*	RD	SE			
Long-eared Owl*			ST		
Short-eared owl		SE	SE	SSC	
Red-headed Woodpecker*	Mgmt. Concern				SSC
Northern Flicker*	Mgmt. Concern				
Acadian Flycatcher*				SSC	ST
Loggerhead Shrike*	RD	ST			SE
Bell's Vireo*					ST
Brown Creeper*		ST			

WINONA DISTRICT

APPENDIX F

Current Staff and Qualifications

The employees below have successfully completed the following fire management courses:*

Robert L. Drieslein	S-130; S-190	April 1982
	I-220	August 1991
	S-390	January 1992
	Fire Management Line Officers	May 1994
	Prescribed Fire Planning and Imp.	January 1996
	And Imp.	
	RXB3 Certification	August 1998
Anthony J. Batya	S-130; S-190	April 1988
	I-220	August 1991
	S-390	January 1992
Brian C. Pember	S-130; S-190	June 1992
	I-220	February 1993
	S-212	June 1996
	S-390	April 1993
Steven F. Erickson	S-130; S-190	March 1994
	S-212	June 2000
Keith L. Beseke (HQ)	S-130; S-190	April 1983
Laurie B. Wlosinski (HQ)	S-130; S-190	April 1990
	S-390	
	I-220	August 1991
	S-290; S-390	July 1993
	Prescribed Fire Planning and Imp.	January 1996
	Burn Boss Refresher	December 2000
	RXB3 Certification	August 1998

* Completion of the above courses does not qualify these personnel to fight a structure fire. They can stand by to prevent grass fires that might result from a structure fire.

An annual fire safety refresher should be attended each year, preferably before the start of the fire season.

LA CROSSE DISTRICT

APPENDIX F

Current staff and qualifications

James Nissen	S-130/190	1982
	S-130/190	1984
	S-390	1985
	I-220	8-1991
	ATV rider safety	12-1999
William Thrune	S-130/190	1983
	ATV rider safety	6-1991
	I -220	8-1991
	S-290	2-1998
	S-212	6-2000
	S-390	7-2000
Lara Hill	S-130/190	3-1990
	S-211	3-1990
	ATV rider safety	12-1999
Christine Lousias	S-130/190	7-1997
	ATV rider safety	6-1989
Kathy Mock	None	

An annual fire safety refresher should be attended each year, preferably before the start of the fire season.

MCGREGOR DISTRICT

APPENDIX F

Current Staff and Fire Qualifications

John Lindell	S130/190 Basic Fire Management Training	1980
	I220 Basic Incident Command System	1990
	S200 Initial Attack Incident Commander	1990
	S390 Fire Behavior	1990
	Fire and Resource Management	April 90
	Smoke Management	1990
Clyde Male	S130/190	April 88
Cathy Henry	S130/190	June 95
	I110	June 95
Tim Loose	Prescribed Fire Burn Boss Type RXB3	Qualified
	S130/190	April 91
	S200	January 95
	S201 Supervisory Concepts and Techniques	March 95
	S211 Portable Pumps and Water Use	June 94
	S212 Power Saws	October 95
	S234 Firing Methods and Procedures	October 95
	S390 Fire Behavior	January 92
	RX80 Preburn Inventory Techniques	July 93
	RX230 Ignition Specialist	October 95
	Prescribed Fire Planning and Implementation	January 96
	I220 Basic Incident Command System	June 92
Neil Henkenius	S130/190	March 1998
Jim Brown	S130/190	1985

SAVANNA DISTRICT

APPENDIX F

Current Staff and Qualification

The following employees have successfully completed the service requirements for fire management training:*

Ed Britton	S-130/ S190 Basic Fire	1981
	S-290 Intermediate Fire Behavior	1992
	S-390 Basic Wildland Fire Behavior	1992
	Fire Management for Line Officers	1994
	Prescribed Fire Planning and Implementation	1997
Pam Steinhaus	S-130/ S190 Basic Fire	1986
	I-220 Basic Incident Command System	1993
	S-290 Intermediate Fire Behavior	1993
	S-390 Basic Wildland Fire Behavior	1993
	RX80 Preburn Inventory Techniques	1993
	Prescribed Fire Planning and Implementation	1997
Bill Davison	I-220 Basic Incident Command System	1993
	S-130 / S190 Basic Fire	1993
	S-211 Portable pumps and water use	1997
	S-290 Intermediate Fire Behavior	1997
Deb Dee-Tranel	S130 / S190 Basic Fire	1991
	S-390 Intermediate Fire Behavior / Fire Behavior Calculations	1992
	I -220 Basic Incident Command System	1993
John Kilburg	I - 100 ICS Orientation	1996
	S-130 / S-190 Basic Fire	1996

* Completion of the above courses do not qualify these personnel to fight a structure fire. If personnel has successfully passed the 45 lb pack test, they can stand by to prevent grass fires that might result from a structure fire.

COMPLEX

APPENDIX G

Employee Contact List

1) Complex Manager Position vacant

2) Keith Beseke, EMP Coordinator (507) 494-6218(Office)
25560 130th Ave. (507) 263-5018 (Res)
Welch, MN 55089

3) Vicky Drieslein, Admin Officer (507) 494-6212 (Office)
Rt 2, Box 3116 (507) 896-3270 (Res)
Houston, MN55943

4) Tex Hawkins, Watershed Biologist (507) 494-6236 (Office)
318 West King Street (507) 452-1385 (Res)
Winona, MN 55987

5) Eric Nelson, Wildlife Biologist (507) 494-6234 (Office)
1306 W. Wincrest Drive (507) 452-1915 (Res)
Winona, MN 55987

6) Cindy Samples, Park Ranger (507) 494-6216 (Office)
337 Knopp Valley Road (507) 452-1481 (Res)
Winona, MN 55987

Joya Szalwinski, Park Ranger (507)494-6207
968 East 9th Street (507) 452-0565
Winona, MN 55987

Laurie Wlosinski, Biologist (507) 494-6235
Route 1, Box 1A (507) 643-6779
Dakota, MN 55925

WINONA DISTRICT

APPENDIX G

Employee Contact List

1) Robert L. Drieslein, District Manager (507) 454-7351 (Office)
Rt. 2, Box 3116 (507) 896-3270 (Res)
Houston, MN 55943

2) Anthony J. Batya, Refuge Operation Specialist (507) 454-7351(Office)
W3876 Hickory Terrace (608) 787-1922 (Res)
LaCrosse, WI 54601

3) Brian C. Pember, Biological Science Tech. (507) 454-7351 (Office)
1618 W. King St. (507) 452-4906 (Res)
Winona, MN 55987

4) Brian J. Stemper, Biological Science Tech. (507) 454-7351 (Office)
52C Links Lane #104 (507) 453-0693 (Res)
Winona, MN 55987

5) Steven F. Erickson, Tractor Operator (507) 454-7351 (Office)
1072 W. Broadway (507) 452-8722 (Res)
Winona, MN 55987

6) Sherri Collins, Administrative Tech. (507) 454-7351 (Office)
200 S. 2nd St., (608) 685-3654 (Res)
Alma, WI 54610

LA CROSSE DISTRICT

APPENDIX G

Employee Contact list

1) James M. Nissen, District Manager — 608/783-8401
1214 Poplar St. — (RES) 507/895-8510
La Crescent, MN 55947

2) Bill Thrune, Refuge Operations Specialist — 608/783-8402
520 Center St. — (RES) 507/643-6396
Dakota, MN 55925

3) Lara Hill, Wildlife Biologist — 608/783-8406
9458 Nebraska Ave. — (RES) 608/654-7337
Cashton, WI 54619

4) Chris Lousias, Biological Technician — 608/783-8404
4507 Mormon Coulee Rd. — (RES) 608/788-2821
La Crosse, WI 54603

5) Kathy Mock, Administrative Assistant — 608/ 783-8405
N16397 Dale Valley Ln. — (RES) 608/582-9912
Galesville, WI 54630

Upper Mississippi River Refuges Complex/Headquarters

1) Complex Manager - vacant

2) Park Ranger -enforcement - vacant

MCGREGOR DISTRICT

APPENDIX G

Employee Contact List

Upper Mississippi River NW&FR, McGregor District
401 Business Hwy 18 North
PO Box 460
McGregor, IA 52157
563-873-3423. Fax# 563-873-3803

Name/Address	Home phone #	Cell phone #
John Lindell, District Manger 14428 Irish Ridge Road Mt. Hope, WI 53816	608-988-4765	563-880-2226
Clyde Male, Asst. District Manager 321 E. Dewey Street Cassville, WI 53806	608-725-5561	563-880-2224
Cathy Henry, ROS Driftless Area 171 Cottontail Road Monona, IA 52159	563-539-8068	563-880-2225
Tim Loose, ROS 304 High Street NE Elkader, IA 52043	563-245-2971	563-880-2223
Neil Henkenius, Bio-Tech 719 Davidson Street Elkader, IA 52043	563-245-3228	563-880-2227
Jim Brown, Maintenance Worker Lot 82 Abel Drive Guttenberg, IA 52052	563-252-3855	
Dixie Palmer, Admin. Tech 303 East Depue Street Monona, IA 52159	563-539-2303	

SAVANNA DISTRICT

APPENDIX G

Employee Contact List

1.) Ed Britton (District Manager) 815/273-2732 (office)
2339 8th St. N.W. 563/243-6972 (RES)
Clinton, IA 52732

2.) Pam Steinhaus (Refuge Operations Specialist) 815/273-2732 (office)
2908 Meadowbrook Dr 563/242-1298 (RES)
Clinton, IA 52732 563/357-0500 (Cell)

3.) Bill Davison (Maintenance Worker) 815/273/3153 (office)
113 North Dearborn 563/652-3466 (RES)
Maquoketa, IA 52060

4.) Alan Anderson (Refuge Operations Specialist) 815/273-2732
3787 Army Depot Rd. 815/273-4789 (RES)
Savanna, IL 61074

5.) Deborah Dee-Tranel (Biological Technician) 815/273-3153
7009 Jewell Lane 815/845-2512 (RES)
Scales Mound, IL 61075

6.) John Kilburg (Laborer) 815/273-3153
12166 400th Ave 563-689-3424 (RES)
Spragueville, IA 52074

7.) Sharon Duxbury (Administrative Technician 815/273-2732
504 Eaton Street 815/273-4395 (RES)
Savanna, IL 61074

WINONA DISTRICT

APPENDIX H

Current Fire Equipment

The following equipment is available for prescribed burns and emergency suppression:

1) 1- 200 gallon pumper unit - purchased 2001
2) 1- Waterbous floating pump
3) 1- 2355 John Deere diesel tractor, 4X4, front-end loader
4) 1- 763 Bobcat with front-end loader
5) 1 - 1997 Suzuki King Quad ATV with front winch and small water tank
6) 1 - Pull behind mower for ATV
7) 1 - 2001 Dodge Dakota, ½ ton, 4x4 pickup (mobile radio)
8) 1 - 2000 Ford 150, 4x4 pickup, extended cab (mobile radio)
9) 1 - 1997 Ford 150, 4x4 pickup, extended cab (mobile radio)
10) 1 - 1994 Ford 150, 4x2 pickup, (mobile radio)
11) 1 - 1990 Dodge Ram W250, 4x4 pickup (mobile radio)
12) 3 - Portable radios
13) 1 - 18 ft. Kann boat - 90 HP Mercury
14) 1 - 18 ft. Kann boat - 70 HP Johnson
15) 2 - Husquavarna Chain Saws
16) 2 - 5 gallon plastic backpack pumps
17) 1 - 5 gallon stainless steel backpack sprayer
18) 8 - flappers
19) 2 - Pulaskis
20) 5 - McLeods
21) 6 - Long handled shovels
22) 6 - garden rakes
23) 12 - fire shelters
24) 3 - bow saws
25) 3 - drip torches

LA CROSSE DISTRICT

APPENDIX H

Current fire equipment

The following equipment is available for emergency fire suppression

1) 1 -200 gallon pumper unit
2) 1 - Waterous Floto-pump
3) 1 - Honda 4 wheel ATV
4) 1 - 4' pull behind rotary mower
5) 2 - chain saws
6) 4 - pulaskis
7) 1 - metal rake
8) 2 - Mcleods
9) 5 - flappers
10) 3 - backpack bag sprayers
11) 3 - backpack can sprayers
12) 2 - drip torches
13) 2 - 16' boats on trailers with 25 HP outboard motors
14) 1 - 20 HP Go-Devil boat
15) 1 - 15' airboat
16) 4 - portable radios
17) 1 - 1992 Chevy ½ ton 4x4 pickup
18) 1 - 1993 Chevy S-10 4x4 pickup
19) 1 - 1999 Dodge 3/4 ton 4x4 pickup

MCGREGOR DISTRICT

APPENDIX H

Current Fire Equipment

The following equipment is available for prescribed burning/emergency fire suppression:

1- 250 gallon slip-on pump unit (new)
1- 200 gallon slip-on pump unit trailer mounted (poor condition)
1- John Deere diesel tractor (model 6410L - 4 wheel drive)
1- rotary brush cutting mower
1- 1996 Dodge Ram 3/4 ton pickup*
1- 1997 Ford F-150 extended cab ½ ton pickup *
1- 2001 Chevy 1500 extended cab ½ ton pickup*
1- 2001 Ford F-350 quad cab 1 ton pickup/gooseneck trailer*
8- Boats with outboard motors
6- portable Bendix King radios
1- 5 gallon galvanized backpack pump
3- 5 gallon Indian backpack pumps
2- drip torches
4- shovels, long handle
2- shovels, short handle
1- Macleod rake
4- chain saws
1- garden rake
2 axes
1- flapper
1- Waterous Floto-pump(very difficult to start and undependable)
* equipped with mobile radio units

Additional equipment needed to bring District to Normal Unit Strength

Heavy duty off-set disc for establishing fire breaks.
2 Portable water pumps, hoses, couplings and nozzles for drafting water directly from the river.
6 Wheel ATV(Gator) with 50 gallon slip on pump unit
1 Slip-on pump(~ 20 gal) for ATV
2 approved 5-gallon safety cans for drip torch fuel
2 sets of chaps and chainsaw helmets(with screens and earmuffs)
4 short handled fire shovels
4 pulaskis
1- 200 gallon slip-on pump unit (replacement for worn-out unit)
3 - fire swatters (flappers)

2- drip torches
4 - fire broom rake

SAVANNA DISTRICT

APPENDIX H

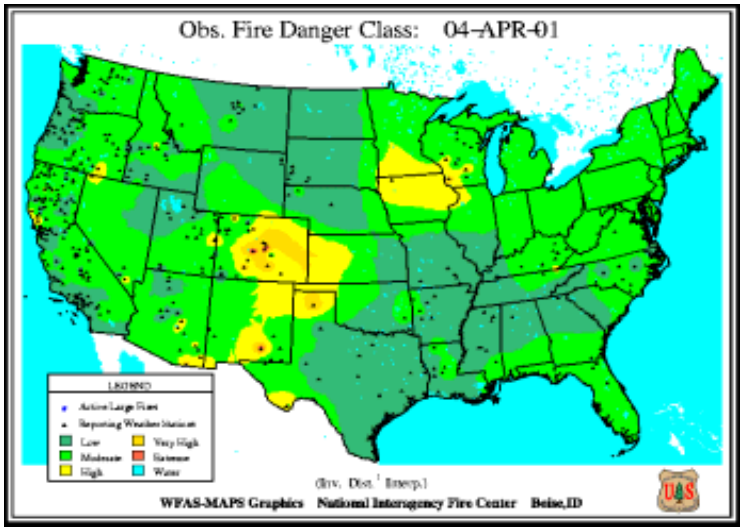
Current Fire Equipment

1) 1 - 200 Gallon pumper unit
2) 1- 1990 Dodge Ram 250 4x4 pickup
3) 1- 1992 Dodge Ram 250 4x4 pickup
4) 1- 1992 Dodge Dakota 4x4 pickup
5) 1- 1994 Chevy S-10 4x4 pickup
6) 1- 1984 International Truck and trailer
7) 1- 1993 Ford F700 Dump Truck
8) 1- D5cIIILGP Dozer
9) 1- JD 310A Backhoe
10) 1- JD 2755 Tractor
11) 1- JD 2640 Tractor
12) 1 - 20' boom Hardy sprayer
13) 1- disk plow
14) 1- 1518 Batwing mower
15) 1- 71/2' woods mower
16) 1- sickle bar mower
17) 1- Kawaski ATV with 25 gallon water tank and trailer
18) 4- drip torches
19) 4- mcleod
20) 5- shovels
21) 4- grass cutter
22) 5- bush hooks
23) 4- pulaskis
24) 3- axe-single head
25) 2- axe double head
26) 9- bow saw
27) 10-big saws
28) 11- swedish bush axe
29) 6- flappers
30) 5- rakes
31) 1- 11/2" waterous floto-pump
32) 6- portable radios
33) 5- fire shelters
34) 5- collapsible backpack sprayer
35) 5- chainsaws

APPENDIX I

Step-Up Plan

(Applies to all 4 Districts)



The Winona District step-up plan will be based on the daily Fire Danger Rating established by the National Interagency Fire Center. This Fire Danger Rating can be found on the U.S. Forest Service website at http://www.fs.fed.us/land/wfas/fd_class.gif. Staffing guide based on daily Fire Danger Rating map.

Adjective Class	Step-Up Action
LOW	Normal Tour of Duty and Operations
MEDIUM	Normal Tour of Duty and Operations
HIGH	Normal Tour of Duty. Daily contact with DNR.. Monitor daily weather forecasts.
VERY HIGH	Normal Tour of Duty for most staff. Daily contact with DNR. Contact cooperative agencies to discuss fire suppression response. Monitor daily weather forecasts. After 5 consecutive days: Use Emergency Presuppression account 9251-PE03 as needed from day to day. Consider weekend duty for qualified staff members No off unit fire assignments.
EXTREME	Normal Tour of Duty for most staff. Daily contact with DNR. Monitor daily weather forecasts. Consider weekend duty for qualified staff members No off unit fire assignments. Follow State fire regulations. No prescribed burning. Use Emergency Presuppression account 9251-PE03 as needed from day to day.

APPENDIX L

REQUIRED CULTURAL/ARCHEOLOGICAL LANGUAGE FOR ALL R-3 FMPs

Preparation for prescribed fires such as constructing fire lines are subject to Section 106 of the National Historic Preservation Act. The procedures in the Notice dated December 8, 1999, "Historic Preservation Responsibilities," apply to the planning and preparation for conducting prescribed fires.

Efforts to control wildland fires (including prescribed fires that get out of control) are also subject to Section 106 of the National Historic Preservation Act. We will meet our obligations under this act in the following ways:

When the land covered by a wildfire has been inventoried to identify cultural resources, and the cultural resources have been evaluated for significance according to the criteria for the National Register of Historic Places, the Fire Management Officer will direct ground disturbing fire suppression efforts around (will avoid impacting) historic properties. Nevertheless, evidence of a previously undetected cultural resource may be encountered. The project leader shall immediately notify the Regional Historic Preservation Officer (RHPO). The RHPO will take immediate steps to have the cultural resource evaluated and protected, as appropriate, to the extent required by law and policy. This may require arranging for a qualified professional to visit and evaluate the site's importance and recommend a course of action. An evaluation and decision on the disposition of the cultural resource should be made within 48 hours of the discovery unless the project's schedule allows greater flexibility.

When the land covered by a wildfire has *not* been inventoried for cultural resources and wildfire suppression activities do result in ground disturbing activities, we will take the following action. Soon after fire control, the project leader will contact the RHPO to arrange for an archeologist to investigate the disturbed areas to determine if sites were affected.

Refuge operations and maintenance funds (subactivity 1261) will pay the cost of these activities unless the action is an emergency archeological and historic property survey in unstable areas prone to further degradation (i.e., erosion) following a wildland fire or in association with an emergency fire rehabilitation treatment. Emergency archeological and historic property surveys in unstable areas prone to further degradation (i.e., erosion) following a wildland fire or in association with an emergency fire rehabilitation treatment, and archeological, historic structure, cultural landscape, and traditional cultural property resource stabilization and rehabilitation can be funded with emergency rehabilitation funding (subactivity 9262).

WINONA DISTRICT

APPENDIX M

Fire Dispatch Plan

When report of smoke or fire is received get as much information from the caller as possible:

Location of smoke or fire
Location of caller
Name and telephone number of caller
Color of smoke
Size of fire
Type of fuel
Character of the fire (running, smoldering)
Anyone fighting the fire?
Did you see anyone in vicinity or vehicles leaving area?
Weather at fire location (particularly wind speed and direction, precipitation)

1) Check map location of fire and determine status.

2) If fire is on refuge, dispatch pickup with 200 gallon pumper, backpack sprayers, flappers, etc. and qualified fire fighters. Contact local cooperators if additional personnel needed. If fire is on refuge islands, dispatch qualified personnel by boat to ensure that any visitors are evacuated. Floto-pump and backpack sprayers are available to fight fires on islands.

3) Notify District Manager

4) Notify Upper Mississippi Complex office (507) 452-4232.

5) Maintain a log of all radio and telephone communications.

6) Remain on duty and dispatch further assistance as ordered from the fire.

See following support items:

Refuge Personnel	Home Phone No.
Robert L. Drieslein, District Manager	(507) 896-3270
Anthony J. Batya, Refuge Operations Specialist	(608) 787-1922
Brian C. Pember, Biological Technician	(507) 452-4906
Brian J. Stemper, Biological Technician	(507) 453-0693

Steven F. Erickson, Tractor Operator	(507) 452-8722
Sherri L. Collins, Admin. Tech.	(608) 685-3654

Support Agencies

Winona Police Department	(507) 454-6100 (911)
Winona Law Enforcement Center/County Sheriff	(507) 457-6368 (911)
	(507) 457-6492 (Dispatch)
Winona Fire Department	(507) 457-6368 (911)
	(507) 457-6492 (Dispatch)
Fountain City Volunteer Fire Department	(608) 685-4433 (911)
Buffalo County Sheriff	(608) 685-4433 (911)
Wabasha County Sheriff/Fire	(651) 565-3361 (911)
Nelson Fire Department	(608) 685-4433
Nelson Police Department	(608) 685-4433
Pickwick Volunteer Fire Dept.	(507) 457-6368 (911)
	(507) 457-6492 (Dispatch)
Minnesota City Volunteer Fire Dept.	(507) 457-6368 (911)
	(507) 457-6492 (Dispatch)
Rollingstone Volunteer Fire Department	(507 457-6368 (911)
	(507) 457-6492 (Dispatch)
National Weather Service, LaCrosse	(608) 782-4533
Wisconsin DNR, Fire Control, Black River Falls	(715) 284-1400 (Switchbd.)
	(715) 284-2858 (Dispatch)

Hospitals

Community Memorial, Winona, MN	(507) 454-3650
Gunderson/Lutheran, LaCrosse, WI	(608) 785-0530
Franciscan-Skemp Medical Center, LaCrosse, WI	(608) 785-0940
Franciscan-Skemp Health Care-Hospital, Arcadia, WI	(608) 323-3341
St. Elizabeth's, Wabasha, MN	(651) 565-4531

Ambulances

Winona Area Ambulance Service, Inc., Winona, MN	(507) 452-5351 (911)
Tri-State Ambulance Service, Inc., LaCrosse, WI	(608) 784-4997
Arcadia Ambulance Service, Arcadia, WI	(608) 323-3341
Alma Police Department, Alma, WI	(608) 685-4433

Adjacent Landowners (Prescribed Burn Units)

Jim Barton (Barton/Lofgren)	(651) 565-4264
Walt Steinberg (Wabasha Prairie)	(651) 767-4453
Jeff Agin (Wabasha Prairie)	(651) 767-4913
Bernice Agin (Wabasha Prairie)	(651) 767-2211
Kelly Agin (Wabasha Prairie)	(651) 767-4935
U.S. Army Corps of Engineers	
L/D #4 (Finger Lakes)	(608) 685-4421
U.S. Army Corps of Engineers	
L/D #5A (McNally) (Prairie Island)	(507) 452-2789
City of Winona - Parks (Prairie Island)	(507) 457-8258

Agency Support

Upper Mississippi River NW&FR, Winona, MN	(507) 452-4232
Regional Office, Ft. Snelling, MN	
Assistant Regional Director, Refuges	(612) 713-5401
Fire Program Manager	(612) 713-5445

Boise Interagency Fire Control

FWS Fire Management Coordinator	(208) 387-5596
Fire Management Office	(208) 387-5595

Minnesota Interagency Dispatch Center

Jim Fletcher	(218) 327-4569

LA CROSSE DISTRICT

APPENDIX M

Fire Dispatch Plan

When a report of smoke of fire is received, get as much information from the caller as possible:

Location of smoke or fire
Location of caller
Name and telephone number of caller
Color of smoke
Size of fire
Type of fuel
Character of the fire (running, smouldering)
Anyone fighting the fire?
Did they see anyone in vicinity or vehicles leaving the area?
Weather at fire location (particularly wind speed and direction, precipitation)

1. Check map location of fire and determine status.

If fire is on refuge, dispatch qualified firefighters in 3/4 ton pickup truck with 200 gallon pumper, backpack sprayers, and hand tools. If fire is on an island or along a shoreline, a boat may be needed to reach the site. Contact cooperators if additional personnel are needed. If possible, fires on islands should be visited to determine if anyone is stranded on the island.

Notify project leader.

Notify Upper Mississippi Refuge Complex office: (507)494-6200.

Maintain a log of all radio and telephone communications.

Remain on duty and dispatch further assistance as ordered from fire.

Refuge personnel	Home Phone No.
Jim Nissen, District Manager	(507)895-8510
Bill Thrune, Refuge Operations Specialist	(507)643-6396
Lara Hill, Wildlife Biologist	(608)654-7337
Ann Blankenship, Park Ranger	(608) 534-6101

Kathy Mock, Administrative Assistant	(608)582-9912

Support Agencies	Phone No.
Trempealeau County Sheriff	(608)538-4351 (911 emergency)
Trempealeau Volunteer Fire Department	(608)534-6464 (911 emergency)
Perrot State Park	(608)534-6409
Winona County Sheriff	(507)457-6368 (911 emergency)
Pickwick Volunteer Fire Department	Dispatched through Winona County
Dakota Volunteer Fire Department	Sheriff: (911 emergency) or (507)457-6492, or (507)457-6368
Houston County Sheriff	(507)725-3379 (911 emergency)
La Crescent Fire Department	(507)895-2083 (911 emergency)
Hokah Volunteer Fire Department	Dispatched through Houston County
Brownsville Volunteer Fire Department	Sheriff: (911 emergency) or
New Albin Volunteer Fire Department	(507)725-3379
La Crosse County Sheriff	(608)785-5942 (911 emergency)
Holmen Fire Department	Dispatched through La Crosse
Onalaska Fire Department	County Dispatch Center:
La Crosse Fire Department	(608)785-9634 (911 emergency)
Campbell Fire Department	
Vernon County Sheriff	(608)637-2124 (911 emergency)
Shelby Volunteer Fire Department	Dispatched through Vernon County
Genoa Volunteer Fire Department	Sheriff: (608)637-2123
Genoa Volunteer Fire Department	(911 emergency)
National Weather Service (La Crosse Office)	(608)782-4533
Wisconsin DNR, Fire Control, Black River Falls	(715)284-1400 (switchboard) (715)284-2858 (dispatch)

Hospitals

Gunderson/Lutheran Hospital, La Crosse, WI	(608)785-0530
Franciscan-Skemp Medical Center, La Crosse, WI	(608)785-0940
Franciscan-Skemp Healthcare - Hospital, Arcadia, WI	(608)323-3341
Community Memorial Hospital, Winona, MN	(507)454-3650

Ambulances

Arcadia Ambulance Service, Arcadia, WI	(608)323-3341 (911 emergency)

Tri-State Ambulance Service, La Crosse, WI	(608)784-4997 (911 emergency)
Winona Area Ambulance Service Inc.	(507)452-5351 (911 emergency)

Agency Support

Upper Mississippi River NW&FR, Winona, MN	(507)494-6200
Regional Office, Fort Snelling, MN	
Assistant Regional Director, Refuges	(612)713-5401
Fire Program Manager	(612)713-5445

Boise Interagency Fire Control

FWS Fire Management Coordinator	(208)387-5596
Fire Management Office	(208)387-5595

Wisconsin Interagency Dispatch Center

Steve Holdsambeck	(715)362-1341

MCGREGOR DISTRICT

APPENDIX M

Fire Dispatch Plan

When report of smoke or fire is received get as much information from the caller as possible:

Location of smoke or fire
Location of caller
Name and telephone number of caller
Color of smoke
Size of fire
Type of fuel
Character of fire (running, creeping, smoldering, confined. structural)
Anyone fighting the fire?
Did they see anyone in the vicinity or vehicles leaving the area?
Weather conditions at fire location (particularly wind speed and direction, precipitation)

1. Check map location of fire and determine status.

2. If fire is on refuge, dispatch appropriate equipment and qualified personnel to fire.

3. Notify District Manager.

4. Notify Upper Mississippi River NW&FR Complex office (507)452-4232.

5. Maintain a log of all radio and telephone communications.

See following support items:

Refuge Personnel	Home Phone No.
John Lindell, District Manager	608/988-4765
Clyde Male, Asst District Manager	508-725-5561
Cathy Henry, ROS Driftless Area	563-539-8068
Tim Loose, ROS	563-245-2971
Neil Henkenius, Biological Technician	563-245-3228
Jim Brown, Maintenance Worker	563-252-3855

Dixie Palmer, Administrative Assistant 563-539-2303

Emergency Dispatch (Fire/Law Enforcement):

May be accessed at any location by calling 911 or direct dialing the nearest County Sheriff's Office. They in turn will dispatch the appropriate Fire, Rescue, or Law Enforcement agency.

Allamakee County Sheriff	563-568-4521
Clayton County Sheriff	563-245-2422
Crawford County Sheriff	608-326-0241
Dubuque County	563-556-1232
Grant County Sheriff	608-723-2157
Vernon County Sheriff	800-637-2123
LaCrosse County Sheriff	608-785-5942

Hospitals:

Central Community Hospital, Elkader, IA	563-245-7000
Finley Hospital, Dubuque, IA	563-582-1881
Franciscan Skemp Medical Center, LaCrosse, WI	608-785-0940
Grant Regional Health Center, Lancaster, WI	608-723-2143
Gunderson Lutheran Medical Center, LaCrosse, WI	608-782-7300
Guttenberg Municipal Hospital, Guttenberg, IA	563-252-1121
Mercy Medical Center, Dubuque, IA	563-589-8000
Prairie Du Chien Memorial Hospital, Prairie Du Chien, WI	608-357-2000
Veteran's Memorial Hospital, Waukon, IA	563-568-3411
Winneshiek County Memorial Hospital, Decorah, IA	563-382-2911

Missouri Interagency Dispatch Center

Lyn Carpenter	573-364-4621 Ext. 48
Chris Aaccetturo	573-364-4621 Ext. 48

SAVANNA DISTRICT

APPENDIX M

Fire Dispatch Plan

When report of smoke or fire is received, get as much information from the caller as possible:

Location of smoke or fire
Location of caller
Name and telephone number of caller
Color of smoke
Size of fire
Type of fuel
Character of the fire (running, smouldering, creeping)
Anyone fighting the fire?
Did they see anyone in vicinity or vehicles leaving area?
Weather at fire location (particularly wind speed and direction, precipitation)

1. Check map location of fire and determine status.

2. If fire is on refuge, dispatch one-ton pickup with 200 gallon pumper and qualified firefighters to fire. Contact cooperators if additional personnel is needed.

3. Notify project leader.

4. Notify Upper Mississippi Complex office: (507)452-4232

5. Maintain a log of all radio and telephone communications.

6. Remain on duty and dispatch further assistance a ordered from the fire.

See following support items:

Refuge Personnel	Home Phone No.
Ed Britton, District Manager	563/243-6972
Pam Steinhaus, Refuge Operations Specialist	563/242-1298 563/357-0500 - cell phone
Bill Davison, Maintenance Worker	563/652-3466

Deborah Dee-Tranel, Biological Technician	815/845-2512
John Kilburg - Laborer	563/689-3424
Support Agencies	Phone No.
Andover Volunteer Fire Department	563/682-7500
Hanover Volunteer Fire Department	815/591-3514 (911 emergency)
Savanna Volunteer Fire Department	815/273-2246 (911 emergency)
Thomson Volunteer Fire Department	815/259-8255 (911 emergency)
Fulton Volunteer Fire Department	815/589-3030 (911 emergency)
JoDaviess County Sheriff	815/777-2141 (911 emergency)
Carroll County Sheriff	815/244-9171 (911 emergency)
Whiteside County Sheriff	815/772-4044 (911 emergency)
Clinton County Sheriff	563/242-9211 (911 emergency)
Jackson County Sheriff	563/652-3312 (911 emergency)
Fire Weather Program - Ray Wolf	563/386-3815

Hospitals

Mercy Medical Center, Clinton, Iowa	563/244-5555
Mercy Health Center, Dubuque, Iowa	563/589-8000
St. Anthony Hospital, Rockford, IL	815/226-2000

Ambulances

Andover, IA	563/682-7500 (911 emergency)
Savanna, IL	815/273-7002 (911 emergency)
Thomson, IL	815/259-8255 (911 emergency)
Fulton, IL	(911 emergency)

Adjacent Landowners to Main Burn Units

Frog Pond - Savanna Twp, Carroll County, IL	
Seven Eagles Campground	815/273-7301
Spring Lake - Savanna Twp, Carroll County, IL	
Burlington Northern Railroad	815/273-3356
Spring Lake Resort - Gil Winters	815/273-4595
Goose Point - Savanna Twp. Carroll County, IL	
Burlington Northern Railroad	815/273-3356
Tom Neumiller	815/273-2461
Simpson Prairie - York West Twp, Carroll County, IL	

Interstate Power	800-747-2611
Thomson Prairie - York West Twp. Carroll County, IL	
City of Thomson - police	815/244-2635
Burlington Northern Railroad	815/273-3356
Paul McGinnis	815/259-2062
Heldt Ditch - Elk River Twp. Clinton County, IA	
I&M Rail Link	563/344-7600

Agency Support

Upper Mississippi River NWFR, Winona, MN	507/452-4232
Regional Office, Fort Snelling, MN	
Assistant Regional Director, Refuges	612/713-5401
Fire Program Manager	612/713-5445

Boise Interagency Fire Control

FWS Fire Management Coordinator, Roger Herb	208/387-5596
Fire Management Office	208/387-5595

WINONA DISTRICT

APPENDIX N

Call Up List for use by Cooperators

Listed below are Fish and Wildlife Service contacts if notification of a wildfire on Upper Mississippi River National Wildlife and Fish Refuge - Winona District (Pools 4, 5, 5a, 6) needs to be made. Those marked with an asterisk can assist on wildfire on adjacent lands as described in the Cooperative Fire Agreement.

1)	Robert L. Drieslein, District Manager Houston, MN	(507) 454-7351 (507) 896-3270 (Res) (507) 450-5073 (Cell)
2)	Anthony J. Batya, Refuge Operation Specialist LaCrosse, WI	(507) 454-7351 (608) 787-1922 (Res) (507) 459-7550 (Cell)
3)	Brian C. Pember, Biological Technician Winona, MN	(507) 454-7351 (507) 452-4906 (Res) (507) 450-8039 (Cell)
4)	Brian J. Stemper, Biological Technician Winona, MN	(507) 454-7351 (507) 453-0693 (Res) (507) 458-9057 (Cell)
5)	Steven F. Erickson, Tractor Operator Winona, MN	(507) 454-7351 (507) 452-8722 (Res) (507) 459-3189 (Cell)

Prescribed Fire Units - Winona District

Unit	Location	Acres	Fuel Model
Barton/Lofgren	Wabasha Co., MN	120	3
Crats Island	Buffalo Co., WI	5.4	3
Grand Encampment	Wabasha Co., MN	3.2	3
Finger Lakes	Wabasha Co., MN	5.0	3
McNally	Winona Co., WI	25.0	3
Polander	Winona Co., WI	1.4	3
Prairie Island	Winona Co., WI	14.0	3
Swan Island	Wabasha Co., MN	10.0	3
Wabasha Prairie	Wabasha Co., MN	30.0	3

LA CROSSE DISTRICT

APPENDIX N

Call up List for use by Cooperators

Listed below are the Fish and Wildlife Service contacts if notification of a wildfire on the La Crosse District of the Upper Mississippi National Wildlife Refuge lands needs to be made. Those marked with an asterisk can assist on wildfires on adjacent lands as described in the Cooperative Fire Agreement.

James M. Nissen, District Manager,	608/783-8405
La Crescent, MN	(RES) 507/895-8510
Bill Thrune,* Refuge Operations Specialist	608/783-8405
Dakota, MN	(RES)507/643-6396
VACANT, Park Ranger	
Lara Hill, Wildlife Biologist	608/783-8406
Cashton, WI	(RES)608/654-7337
Christine Lousias,* Biological Technician	608/783-8405
La Crosse, WI	(RES)608/788-2821
VACANT, Complex Manager	

MCGREGOR DISTRICT

APPENDIX N

Call-Up List for use by Cooperators

1) John Lindell, District Manager Mt. Hope, WI	work # 563/873-3423 home # 608/988-4765 cell # 563/880-2226
2) Clyde Male, Asst District Manager Cassville, WI	work # 563-873-3423 Cassville warehouse 608/725-5198 home # 508-725-5561 cell # 563-880-2224
3) Cathy Henry, ROS Driftless Area Monona, WI	work # 563/873-3423 home # 563-539-8068 cell # 563-880-2225
4) Tim Loose, ROS Elkader, IA	work # 563-873-3423 home # 563-245-2971 cell # 563-880-2223
5) Neil Henkenius, Bio-Tech Elkader, IA	work # 563-873-3423 home # 563-245-3228 cell # 563-880-2227
6) Jim Brown, Maintenance Worker Guttenberg, IA	work # 563-873-3423 home # 563-252-3855

SAVANNA DISTRICT

APPENDIX N

Call Up List for use by Cooperators

Listed below are Fish and Wildlife Service contacts if notification of a wildlife on the Savanna District of the Upper Mississippi River National Wildlife Refuge lands need to be made. Those asterisk can assist on wildfires on adjacent lands as described in the Cooperative Fire Agreement.

Ed Britton, District Manager	815/272-2732
Clinton, IA	(RES) 563/243-6972
Pam Steinhaus, Refuge Operations Specialist	815/273-2732
Clinton, IA	(RES) 563/242-1298
	563/357-0500 - cell phone
Bill Davison, Maintenance Worker	815/273-3153
Maquoketa, IA	(RES) 563/652-3466
Deborah Dee-Tranel, Biological Technician	815/273-3153
Scales Mound, IL	(RES) 815/845-2512
John Kilburg - Laborer	815/273-3153
Spragueville, IA	(RES) 563/689-3424
Sharon Duxbury, Adminstrative Technician	815/273-2732
Savanna, IL	(RES) 815/273-4395

WINONA DISTRICT

APPENDIX O

Fish and Wildlife Service Radio Frequencies

	RX Freq. (MHZ)	RX Code (MHZ)	TX Freq.	TX Code
Car-to-Car	171.75000	None	171.75000	None
LaCrescent Repeater	171.75000	None	172.45000	127.3
Alma Repeater	171.75000	None	172.45000	156.7

Channel Assignments (Portables)

Zone 4

1)	LaCrescent Repeater	(WN-FWS2-LAC)
2)	Alma Repeater	(WN-FWS4-ALM)
3)	Wisconsin/Minnesota State	(WN-WIS-MNS)
4)	Wisconsin DNR - Purple	(WN-WDR-PU)
5)	Wisconsin DNR - Blue - C	(WN-WDR-BL-C)
6)	Wisconsin DNR - Blue-E	(WN-WDR-BL-E)
7)	Minnesota DNR	(WN-MDR-C)
8)	Buffalo County Sheriff - NR	(WN-BUF-NR)
9)	Buffalo County Sheriff - SR	(WN-BUF-SR)
10)	Trempealeau County Sheriff - NR	(WN-TPL-NR)
11)	Trempealeau County Sheriff - SR	(WN-TPL-SR)
12)	Wabasha County Sheriff - NR	(WN-WAB-NR)
13)	Wabasha County Sheriff - SR	(WN-WAB-SR)
14)	Winona County Sheriff - NR	(WN-WIN-NR)
15)	Winona County Sheriff - MR	(WN-WIN-MR)
16)	Winona County Sheriff - SR	(WN-WIN-SR)

Zone 1

1)	Car-to-Car	(FWS ICC)
2)	LaCrescent Repeater	(FWS LAC/SAV)
3)	Lynxville Repeater	(FWS LNX)
4)	Dickeyville/Alma Repeater	(FWS DCK/ALM)
5)	Weather	(FWS NOAA1)
6)	Weather	(FWS NOAA3)
7)	Weather	(FWS NOAA4)
8)	Weather	(FWS NOAA7)

Channel Assignments (Mobiles)

Zone 4

1)	LaCrescent Repeater	(WN-FWS2-LAC)
2)	Alma Repeater	(WN-FWS4-ALM
3)	Wisconsin/Minnesota State	(WN-WIS-MNS)
4)	Wisconsin DNR - Purple	(WN-WDR-PO)
5)	Wisconsin DNR - Blue - C	(WN-WDR-BL-C)
6)	Wisconsin DNR - Blue - E	(WN-WDR-BL-E)
7)	Wisconsin DNR - Brown	(WN-WDR-BR)
8)	Minnesota DNR - C	(WN-MDR-C)
9)	Buffalo County Sheriff - NR	(WN-BUF-NR)
10)	Buffalo County Sheriff - SR	(WN-BUF-SR)
11)	Trempealeau County Sheriff - NR	(WN-TPL-NR)
12)	Trempealeau County Sheriff - SR	(WN-TPL-SR)
13)	Wabasha County Sheriff - NR	(WN-WAB-NR)
14)	Wabasha County Sheriff - SR	(WN-WAB-SR)
15)	Wabasha County Sheriff - C	(WN-WAB2-C)
16)	Winona County Sheriff - NR	(WN-WIN-NR)
17)	Winona County Sheriff - MR	(WN-WIN-MR)
18)	Winona County Sheriff - SR	(WN-WIN-SR)

Zone 1

1)	Car-to-Car	(FWS-1CC)
2)	LaCrescent Repeater	(FWS-2LAC/SAV)
3)	Lynxville Repeater	(FWS-3LNX)
4)	Dickeyville/Alma Repeater	(FWS-4DCK/ALM)
5)	Weather	(FWS-NOAA1)
6)	Weather	(FWS-NOAA3)
7)	Weather	(FWS-NOAA4)
8)	Weather	(FWS-NOAA7)

Cell Phone Numbers

1)	(507) 450-5073	(Bag Phone)
2)	(507) 459-3189	(Bag Phone)
3)	(507) 450-8039	(Pocket Phone)
4)	(507) 459-7550	(Pocket Phone)
5)	(507) 458-9057	(Bag Phone)

Radio Call Numbers for Fish and Wildlife Personnel
Upper Mississippi River National Wildlife and Fish Refuge

Winona District KQC615

200 District Base
201 Bob Drieslein, District Manager
F202 Tony Batya, Refuge Operations Specialist
F203 Brian Pember, Biological Technician
205 Steve Erickson, Tractor Operator
207 Brian Stemper, Biological Technician
F206 Park Ranger (Law Enforcement), (Vacant)

Headquarters KQC615

100 Headquarters Base
101 Complex Manager (vacant)
103 Cindy Samples, Park Ranger (Interpretive)
104 Tex Hawkins, Private Lands
105 Eric Nelson, Biologist
107 Keith Beseke, Complex Engineer
108 Vicky Drieslein, Admin. Officer
109 Joya Szalwinski, Volunteer Coordinator
F116 Laurie Wlosinski, Biologist

LaCrosse District KQC612

300 District Base
301 Jim Nissen, District Manager
F302 Bill Thrune, Refuge Operations Specialist
303 Lara Hill, Biologist
304 Park Ranger (Interpretive), (Vacant)
306 Christine Lousias, Biological Technician

Trempealeau National Wildlife Refuge

700 Refuge Base
701 Bob Drieslein, Refuge Manager
702 Lisa McCurdy, Refuge Operations Specialist
703 Ann Prochowicz, Administrative Technician
704 Cindy French, Biological Technician
705 Joe Reid, Maintenance Mechanic
706/708 Temporary personnel

LA CROSSE DISTRICT

APPENDIX O

Fish and Wildlife Service Radio Frequencies

	RX FREQ.	RX CODE	TX FREQ.	TX CODE
Car-to-car	171.7500 MHZ	None	171.7500 MHZ	None
La Crescent Repeater	171.7500 MHZ	None	172.4500 MHZ	127.3 Hz

Channel Assignments*

Upper Mississippi River and Trempealeau Refuges
Upper Mississippi River Refuge repeater -La Crescent
Upper Mississippi River Refuge repeater - Mc Gregor
Minnesota DNR
Wisconsin DNR - Purple
Wisconsin DNR - Blue Echo
Corps of Engineers - Lock and Dam
Open - not assigned
La Crosse County Sheriff
La Crosse County Coordination
Minnesota State Patrol
Wisconsin State Patrol - District 5
National Emergency - Wispern
Weather - La Crosse

Channel assignments may vary from radio to radio as location of agency on particular channel. New mobile radios will hold more than the 14 channels used on portable radios. Refer to directory on radio to assure proper channel. Channel 1 is always for refuge communications

Cell Phone Numbers

608/780-6344
608/780-6345
608/780-6346

Radio Call Numbers for Fish and Wildlife Personnel

Upper Mississippi River National Wildlife and Fish Refuge
La Crosse District KQC612

300 District Base
301 Jim Nissen, District Manager
F302 Bill Thrune, Refuge Operations Specialist
303 Lara Hill, Biologist
304 Park Ranger (Interpretive)
306 Christine Lousias, Biological Technician

Headquarters KQC615

100 Headquarters Base
101 Complex Manager
103 Cindy Samples, Park Ranger (Interpretive)
104 Tex Hawkins, Private Lands
105 Eric Nelson, Biologist
107 Keith Beseke, Complex Engineer
108 Vicki Drieslein, Budget
109 Joya Szalwinski, Volunteer Coordinator
F116 Laurie Wlosinski, Biological Technician
F119 Park Ranger (Law Enforcement)

Winona District KQC615

200 District Base
201 Bob Drieslein, District Manager
F202 Tony Batya, Refuge Operations Specialist
F203 Brian Pember, Biological Technician
205 Steve Erickson, Tractor Operator
207 Brian Stemper, Biological Technician

Trempealeau National Wildlife Refuge KQC614

700 Refuge Base
701 Refuge Manager
702 Lisa McCurdy, Refuge Operations Specialist
703 Ann Prochowicz, Administrative Assistant
704 Biological Technician
705 Maintenance Mechanic
706 Temporary personnel
707 Ruth Gille, Green Thumb employee

McGREGOR DISTRICT

APPENDIX O

Fish and Wildlife Service Radio Frequencies

	RX Freq. (MHZ)	RX Code (MHZ)	TX Freq.	TX Code
FWS - Simplex (Radio to Radio)	171.75000	None	171.75000	127.3
Lynxville Repeater	171.75000	None	172.45000	141.3
Dickeyville Repeater	171.75000	None	172.45000	156.7

Channel Assignments*

1. FWS Nationwide Channel Assignment/Upper Mississippi River NW&FR
B. Wisconsin DNR Conservation Officers
C. FWS Repeater - Lynxville
D. FWS Repeater - Dickeyville
E. Crawford County Sheriff - Prairie Tower
F. Maritime 14 and Lock and Dams
G. Allamakee County Sheriff - Operations
H. Clayton County Sheriff - Operations
I. Clayton & Allamakee County Mutual Aid
J. Grant County Sheriff - Cassville Repeater
K. Grant County Sheriff - Lancaster Repeater
L. Vernon County Sheriff - Operations
M. Houston County Sheriff - Operations
N. Dubuque County Sheriff - Operations

Channel assignments may vary from radio to radio as location of agency on particular channel. New Mobile radios will hold more than the 14 channels used on portable radios. Refer to directory on radio to assure proper channel. Channel 1 is always for refuge communications.

Cell Phone Numbers

319-880-2223	Tim Loose
319-880-2224	Clyde Male
319-880-2225	Cathy Henry
319-880-2226	John Lindell
319-880-2227	Neil Henkenius

Radio Call Numbers for Fish and Wildlife Personnel

Upper Mississippi River National Wildlife and Fish Refuge

McGregor District KQC616

310 District Base
317 John Lindell
F318 Clyde Male
F319 Cathy Henry
F320 Tim Loose
321 Jim Brown
Flood 1
Flood 2
Flood 3
McGregor 1 Neil Henkenius

La Crosse District KQC612

300 District Base
301 Jim Nissen, District Manager
F302 Bill Thrune, Refuge Operations Specialist
303 Lara Hill, Biologist
304 Park Ranger (Interpretive)
306 Christine Lousias, Biological Technician

Savanna District KQC611

600 Refuge Base
601 Ed Britton, District Manager
602 Pam Steinhaus, Refuge Operations Specialist
603 Deb Dee-Tranel, Biological Technician
604 Bill Davison, Maintenance Worker
605 Alan Anderson, Refuge Operations Specialist
606 Brent Taylor, Park Ranger
607 John Kilburg, Laborer

Headquarters KQC615

100 Headquarters Base
101 Complex Manager
103 Cindy Samples, Park Ranger (Interpretive)
104 Tex Hawkins, Private Lands

105 Eric Nelson, Biologist
107 Keith Beseke, Complex Engineer
108 Vicky Drieslein, Administrative Officer
109 Joya Szalwinski, Volunteer Coordinator
116 Laurie Wlosinski, Biological Technician
119 Park Ranger (Law Enforcement)

SAVANNA DISTRICT

APPENDIX O

Fish and Wildlife Service Radio Frequencies

	RX FREQ	TX FREQ	TONE
Car-to-Car	171.75	171.75	None
Palisades Repeater	171.75	172.45	127.3

Channel Assignments*

2. Upper Mississippi River Refuge
3. Upper Mississippi River Repeater
3. Future Repeater
O. Future Repeater
P. Carroll County (Illinois) Sheriff
Q. Illinois State Police
R. COE
S. ISPERN - Mutual Aid
T. Iowa DNR - Car to Car
U. Jackson County (Iowa) Sheriff
V. Iowa DPS (Maquoketa)
W. Illinois DOC - Car to Car
X. NOAA - Rockford, IL
Y. NOAA - Moline, IL

Channel assignments may vary from radio to radio as far as location of agency on particular channel. Refer to directory on radio to assure proper channel. Channel 1 is always for refuge communications.

Cell Phone Numbers

563-249-2809
563-249-2808
563-249-0582
563-249-0580
563-249-0341

Radio Call Numbers for Fish and Wildlife Personnel

Savanna District KQC611

600 Refuge Base
601 Ed Britton, District Manager
602 Pam Steinhaus, Refuge Operations Specialist
603 Deb Dee-Tranel, Biological Technician
604 Bill Davison, Maintenance Worker
605 Alan Anderson, Refuge Operations Specialist
606 Brent Taylor, Park Ranger
607 John Kilburg, Laborer

McGregor District KQC616

310 District Base
317 John Lindell
F318 Clyde Male
F319 Cathy Henry
F320 Tim Loose
321 Jim Brown
Flood 1
Flood 2
Flood 3
McGregor 1 Neil Henkenius

Headquarters KQC615

100 Headquarters Base
101 Complex Manager
103 Cindy Samples, Park Ranger (Interpretive)
104 Tex Hawkins, Private Lands
105 Eric Nelson, Biologist
107 Keith Beseke, Complex Engineer
108 Vicki Drieslein, Budget
109 Joya Szalwinski, Volunteer Coordinator
F116 Laurie Wlosinski, Biological Technician
F119 Park Ranger (Law Enforcement)